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RECENT CASES  
OF  
SMALL POX

SUBSEQUENT TO  
VACCINATION.

TO WHICH ARE ADDED,  
EXPERIMENTS

TO ASCERTAIN THE EFFECT OF VACCINATING  
IN THE HAND IN IMITATION OF THE

CASUAL DISEASE;

WITH

FACTS, AND OBSERVATIONS

ON THE EFFECT OF ERUPTIVE DISEASES IN REMOVING  
THE SECURITY DERIVED FROM

COW POX.

---

BY WILLIAM GOLDSON,

*Member of the Royal College of Surgeons, in London.*

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P O R T S E A :

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1805.

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OMNES HOMINES, P. C. QUI DE REBUS DUBIIS  
CONSULTANT, AB ODIO, AMICITIA, IRA, ATQUE MI-  
SERICORDIA VACUOS ESSE DECEET.

SALLUST.

OMNIA PATEFACIENDA, UT NEQUID OMNINO  
QUOD VENDITOR NORIT, EMPTOR IGNORET.

TULL.





TO THE,  
PRESIDENT AND MEMBERS  
OF THE  
MEDICAL SOCIETY  
AT  
PORTSMOUTH,

AS A MARK OF RESPECT;

AND  
TO THOSE OTHER  
PROFESSIONAL GENTLEMEN

WHOSE CANDOUR AND LOVE OF TRUTH  
WILL LIKEWISE LEAD THEM TO AN IMPARTIAL  
INVESTIGATION;

IN WHOSE HANDS  
THE INTERESTS OF SOCIETY,

AND  
THE AUTHOR'S REPUTATION,

WILL BE EQUALLY

SECURE;

THE FOLLOWING PAGES ARE MOST RESPECTFULLY  
ADDRESSED.





## P R E F A C E.

---

*TO stem the torrent of public opinion is a difficult task; but when it is founded on principles of false reasoning, operating to the injury of Society, it becomes a duty to attempt it. With this view, some cases were formerly laid before the public; when, from the result of experience, it was concluded,—*

THAT inoculated Cow Pox is only a temporary preservation, and that a person, at one time secure, may again become susceptible of Small Pox.

*The thunders of the Vatican against the first reformers in religion scarcely exceeded, in vehemence, the calumny levelled against this attempt*

## P R E F A C E.

*at reform in the practice of Vaccination. The author was deemed a madman, his veracity was called in question, and his intentions were illiberally attributed to the most base and sordid purposes.*

*Yet the attentive reader must have marked the result. A few months only had elapsed, before this conclusion was most decidedly confirmed in the practice of some, the most eminent in the profession! Hence a spirit of inquiry has been excited, that cannot fail to benefit the interests of Society. To further this, is the object of the present publication.*

QUEEN-STREET, PORTSEA,

JAN. 12, 1805.

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## PRELIMINARY OBSERVATIONS.

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“**E**VERY medical subject, as all must be important to the Public, ought to be amply investigated. Individuals in the profession have no other way of disinterestedly exerting their usefulness, not only to mankind at large, but as involving them in particular to the improvement of Medical Science. Such have been my motives on all occasions, as well as on the present important subject, and I trust they will continue to be the leading features of my conduct.”

*Dr. Rollo's Medical Report.*

THESE sentiments are so honourable to the respectable author, and at the same time are so congenial to my own feelings, that I have taken the liberty to quote them here as an introduction to the following observations.

FROM the zeal with which the doctrine of Vaccination has been diffeminated, it was not to be expected, that any publication which tended to call in question its prophylactic powers, would be received without some considerable degree of opposition. But, as I have always made it the object of my endeavours, to treat any subject which I might have occasion to lay before the public, in a manner becoming me as a gentleman ; and as the Cases of Small Pox subsequent to Vaccination, which I lately published, have been admitted by the most respectable part of the profession, to be conveyed in terms of candour and liberality ; it was but reasonable for me to expect a reciprocity of conduct.

THOSE who know me can best appreciate the purity of my intentions. They will readily testify, that the attainment of truth was the sole object I ever had in view. Conscious of the importance of the subject, and knowing that what I had to advance was founded on facts ; considering likewise at the same time, that, as from collision sparks are emitted, so



from controversy when properly conducted, we might expect to elicit truth; I did, and do still consider myself fully justified, in attempting to engage the attention of the profession, and excite them to an investigation, solemn and dignified, equally worthy the claims of the inventor, and the interests of society at large.

How I have conducted myself on this occasion, I leave to the impartial to judge. Open to conviction, I have made, not only the professional reader, but the public themselves, the judges, how far I was correct in forming my opinions, by detailing the cases in such manner, that if I were mistaken, either of them might be enabled to point out wherein I might have erred.

VACCINATION might very justly be compared to a meteor; splendid at its appearance, rapid in its progress, and possessing powers of attraction almost irresistible. But what is not easily to be accounted for, on the common principles of mens actions in the pursuit of other sciences, to entertain a doubt of its in-



fallibility, is a crime not to be forgiven. And even to differ in opinion on the principles of the practice, although tending to the same general purport, is punished with nothing less than the loss of fellowship and connection with the original promoters.

To stem all at once the tide of popular opinion was not my object. It never was my intention either to provoke controversy. Investigation alone was what I sought for, and my expectations have been answered. It has been found, that the torrent of opinion has not drawn every one into the vortex of abuse. And if my ideas have not hitherto been confirmed, I have not been fully confuted. At the same time, I feel a satisfaction that I have been the cause of an investigation, which has already produced some facts that cannot fail to be useful to the interests of society.

THE public at any rate have derived one very material advantage from the discussion. It has produced some observations from Dr. Jenner himself, which cannot fail to place the practice on a firmer footing than it was before.

An appearance, spurious in itself, but liable, from its deceptious form, to be mistaken for the true vesicle, has been found to take place in children, who, at the time of vaccination are labouring under *Psoeiasis diffusa*. Virus taken from such subjects will *perpetuate* a disease, which although it bears so strong an affinity to the genuine, will not render the constitution unsusceptible of the small pox. This important feature in the practice, so necessary to be known, was little understood, until the publication of a paper by Dr. Jenner in the Medical Journal for July last.

The succeeding extracts will likewise shew that the subject was of importance sufficient to merit a cool and deliberate investigation by some of the most respectable members of the profession.

“ SEVERAL of our Governors came forward on the days of transacting business, to state that it was the duty of the medical establishment to notice, not only the facts of this author, but *similar adverse ones, now FREQUENTLY occurring in other quarters.* Although it is now

believed that Mr. Goldson's pamphlet, owing to the author's want of information, was, by mistake, addressed to another institution, it is equally our duty to act for the benefit of the public concerning the question supposed to be at issue. We accordingly offer the following Statement of Evidence, trusting that the interests of society will be promoted by the inquiry, for which the public will owe obligations to those who have provoked it. Because, if the cow pock destroys the susceptibility of the small pox as extensively as going through the small pox does; then to obtain that benefit, the practice of vaccination must be further, and more generally, investigated than has hitherto been the case; but if vaccination be not so extensively efficacious as variolation, then it is fitting that the public be informed of the real value of the new inoculation, that it may be adopted for as much as it is worth."—*Statement of Evidence, by the Physicians of the original Vaccine Pock Institution.*

SENTIMENTS such as these, replete with REAL and GENUINE marks of Philanthropy, convey-

ed in language so liberal, demand not only from the profession, but from the public at large a tribute of applause. And I trust that the Physicians of the Institution will conceive, that I feel the marked attention they have paid me. To Dr. Rollo and Mr. Dunning likewise I owe obligations for the gentlemanly manner in which they have taken up the subject. And from the experience I have hitherto had of their candour, I feel myself confident, that, in the progress of this inquiry, should I differ from any of them in the conclusions they have drawn, or the deductions they might have made, they will not be led to a less favourable opinion of my intentions, than they have hitherto been disposed to entertain.

THERE are others who have thought proper to substitute abuse for investigation. To record their names in the same page with those to whom I have just confessed my obligations would disgrace my pen ; and to combat them I find myself unequal. That controversy cannot be guided by the rules of society is much to be lamented ; but certainly what is confi-



dered an offence in the one, ought most cautiously to be guarded against in the other. The best friends of the Jennerian discovery will the most lament that it is defended by such weapons.

VOID of argument, and not pretending to investigate the subject, such attacks are too feeble to attain the object the writers had in view, that of irritating me to answer them. Like the buzzing of a fly, they may teize for the moment, but they want the power to provoke resentment.

I FEEL much more concern, that I cannot consider Dr. Jenner's conduct on this question such as I had reason to expect. Perhaps he might think that I over-rate my attention on a former occasion. At any rate I have the right to claim the merit of it as honourable, and at that crisis not unimportant to him. I was not a little hurt therefore, I must confess, when Dr. Tierney, at a large meeting of the Profession assembled about the latter end of May from different parts of Suffex, at Brighton, read a letter he had just received from

Dr. Jenner. As that letter was communicated to a public meeting, I conceive myself within the bounds of propriety in making use of it. Adverting to the cases I had just published,

“ He had not then seen the work, yet from the statement given him, he coincided in opinion that it ought to be answered, and that it would be done without Dr. Tierney’s giving himself any further trouble, very shortly;” at the same time remarking, “ that the practice of Vaccination had always been ill conducted at Portsmouth, owing to imperfection of virus, from beginning to end.”

FROM whence he derived his authority for an assertion so very unqualified, I am at a loss to conceive, nor could I ever gain information what publication he alludes to as an answer that would shortly appear. I have too high an opinion of him to suppose, that he would sanction downright abuse, although it has been so liberally bestowed by persons most in his confidence. Indeed in a paper published by himself, and which I have just now had occasion to advert to, it must be evident he had me in view, yet he has not been so candid as

to mention my name ; but I can assure him that the circumstances are not similar. In all the children whose cases I published, the vesicle was a genuine vesicle, and has left a mark sufficiently distinct. Neither had they *Psoiafi diffusa*, or any *other* affection of the skin that could arrest the regular progress of the disease.

THE Edinburgh testimonial as it is called, contains a remark that I cannot suffer to pass unnoticed. After giving a decided opinion! without producing the least evidence of having for a length of time investigated the subject, they say, that,

“ THEY think it must be the opinion, not only of the medical gentlemen of Edinburgh, but of every thinking man, that if Vaccination is a security against the small pox for a year, it must be a security against it for life. The contrary idea appears to them unphilosophical and repugnant to their ideas of physiology and pathology.—*London Medical and Physical Journal*.

I NEED not detain the reader to ascertain the extent of their ideas of physiology and pathology. It is only necessary for me to refer



to the thirteenth, and the two succeeding Cases in Dr. Jenner's Inquiry. These are important, and are introduced by the following observations: "One instance has occurred to me of the system being affected from the matter issuing from the heels of horses, and of its remaining afterwards unsusceptible of the variolous contagion; another, where the small pox appeared obscurely; and a third, in which its complete existence was positively ascertained."

"FIRST, Thomas Pearce, who never had the cow pox, was infected from the horses heels; six years afterwards he was repeatedly inoculated, and exposed to contagion without effect."

"SECONDLY, James Cole had a disease from the same source, and was some years afterwards inoculated with variolous matter. He had a little pain in the axilla, and felt a slight indisposition for three or four hours. A few eruptions shewed themselves on the forehead, but they very soon disappeared without advancing to maturation."

THE last case is introduced by the following remark: "Although in the two former instances the system seemed to be secured, or nearly so, from variolous infection, by the absorption of matter from sores produced by the diseased heels of horses, yet the following case decisively proves that this cannot be entirely relied upon, until a disease has been generated by the morbid matter from the horse on the nipple of the cow, and passed through that medium to the human subject."

"MR. ABRAHAM RIDDIFORD was affected in the same manner as the others. The sores had such resemblance to the genuine cow pox, that a surgeon assured him, he never need to fear the infection of the small pox; but this assertion proved fallacious, for, on being exposed to the infection upwards of twenty years afterwards, he caught the disease, which took its regular course in a very mild way. There certainly was a difference perceptible, although it is not easy to describe it, in the general appearance of the pustules from that which we commonly see. Other practitioners, who visited

the patient at my request, agreed with me in the point, though there was no room left for suspicion as to the reality of the disease, as I inoculated some of his family from the pustules, who had the small pox, with its usual appearances, in consequence."

It might equally as well have been concluded, that, because Pearce resisted variolous contagion at the end of six years, it was unphilosophical, and repugnant to the ideas of physiology and pathology if any opinion had been advanced, prior to the event happening, that the same resisting power would not have equally held good in Riddiford. To further what is called "the labour in the vineyard of humanity," their enthusiasm appears to have led them rather hastily to decide, without recollecting what had long before been ascertained, that the parent source of Vaccination, the grease in the horse, would prevent small pox for six years but not for twenty.

THE strong analogy between these cases and those which happened subsequent to vaccination, must be obvious to the most cursory ob-

server. The resemblance is so strongly marked, that I cannot avoid noticing it here. Not only the eruptions succeeding inoculation, but the pustules from contagion likewise, in both instances have the same common character. Each retaining, more or less, evidence decisive of a resisting power which had formerly existed in the system; but which appears to have been diminished in proportion to the distance of time from its action first taking place.

DR. DE CARRO of Vienna has resorted, it appears, to the matter from the horses heels, without keeping in mind the foregoing experiments of Dr. Jenner. He has made some observations on my pamphlet: these were published in the Medical and Physical Journal for November. I cannot help noticing some of his own remarks.

“ Equo credo; lympham equinam quotidie infero, illamque in ditiones Austriacas, in numerosque alias regiones Europæ et Asiæ sine metu spargo. Vale, et ama Doctorem De Carro, vaccinatorem et equinatorem; sed nun-



quam, sicut medici et chirurgi Portûs Magni, variolarum infitorem.”

As through the same channel there is reason to suppose, any observations from me may reach him, sooner than I may find an opportunity to convey them; I shall take the liberty to insert them in this place.

NOTIS pro tuis gratias ne renue, Doctissime vir, nec vero consilium, contemne.

EXPERIENTIAM in equinatione, etiam atque etiam, respice Jenneri, sententiam nec retice ejus. Festina non lente, nam labuntur anni, ubicunque per terras lympham sparsisti equinam, tui, incautos præmonere, ne gravius dicam, fervoris. Improisos, haud procul, averte dolores.

VIRI amicitiam accipe, junctis qui manibus diligenter investigabit, sed fiat sententia ejus; veritatem nunquam effugere.

IN the following sheets, I shall proceed to consider the objections that have been urged against the cases I before published of small pox succeeding vaccination after a certain period of time. Other cases which have since occurred will be noticed. To these will be added, the appearances in a case of small pox after vaccination, which had been rendered imperfect, by a rupture of the vesicle so late as

the eighth day ; with observations on the analogy of chicken pox to small pox. Some remarks will be added on the *hybrid* disease seen in the early part of the practice, at the Small Pox Hospital, under circumstances of previous variolation, compared with the small pox, as it has since appeared at a more remote period from Vaccination. These will be succeeded by observations on the difference in colour and appearance between the casual and inoculated cow pox.

I have made some experiments myself, and others have been made at my request, which will be related, to ascertain the effect of cow pox inoculated on the hand, in imitation of the casual disease. The peculiar appearance of the vesicle, and the probable good effect of that mode of inoculation, cannot fail to be interesting to the candid inquirer, should they not ultimately be found to be beneficial to the practice itself.

A DETAIL OF CASES FORMERLY PUBLISHED,  
WITH OBSERVATIONS.

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THE case of Mr. Grant's child affords an instance of eruptions not maturing, the effect of inoculation for small pox at the distance of three years and three months from vaccination.

THE features of this case were not so prominent as some of the others, yet it seems to have obtained more discussion than the whole of them put together. The reason for this is obvious. The child was vaccinated by Mr. Paytherus, a confidential friend of Dr. Jenner. If this case therefore were to be established as an instance of failure, it would be considered as having more effect than either of the others. With consistency they could not accuse *him* of ignorance in the practice, and he had cer-



tified his patient to have acquired all the advantages that can be derived from cow pock inoculation.

THERE are two *distinct* circumstances in the statement, which ought to be *separately* attended to, and not confounded as they have been with each other.

THE child was inoculated in the morning of Monday the 19th of December. The inflammation was evidently more rapid than it is observed to be in common inoculated small pox. On Saturday the 24th, the areola was extensive, but on the next day there was so conspicuous an alteration, the colour being less florid, that I was induced to think it was subsiding. I informed Mr. Grant that there had been a strong effort to produce small pox, but it was over, and would disappear in a few days. In this however I was mistaken, for there was a visible alteration on Monday the 26th. The child had been rather feverish and restless during the first part of the night, and *early in the morning* six or seven eruptions were seen on the forehead and breast; these

continued to increase until Friday, when they died away with a watry scurf on their apex.

IN the *evening* a violent rigor came on, succeeded by accession of fever, at which time a considerable efflorescence appeared on *both* arms; this however subsided by the next day, while the eruptions which had appeared in the morning were found to be more prominent.

AT the time of the rigor warm wine was given by the friends, and to allay further irritation I ordered it an opiate. This mode of treatment has been pursued I believe by the first practitioners, yet I have been found fault with for adopting it, and what is very extraordinary, the eruptions that came out in the morning are attributed to the warm regimen and the stimulus of the opiate given at night.

It is contended that these eruptions were not small pox, but that they were only sympathetic affection of the skin. Prior to the knowledge of the influence of cow pox on the human constitution, if a regular statement of this case had been sent for the opinion of the

Physicians of the Small Pox Hospital, I will venture to assert they would have decided the *eruptions* that appeared early on the Monday morning on the face and breast, continuing until the Friday, a period of more than four days, to have been distinct small pox. While the *efflorescence* in the evening, with fresh accession of fever, they must have deemed what it really was, sympathetic affection of the skin. The slight degree of fever on Sunday night, was the fever of infection; while the violent accession on Monday evening proceeded from irritation.

It might be remarked, that when making experiments to ascertain the preventive power of matter from the horses heels, in the case of Pearce, where there was not more constitutional affection or eruptions, Dr. Jenner deemed it small pox, and consequently inimical to the theory he was then seeking to establish.

AMONG the many thousands that were inoculated within a few months after undergoing the disease, in answer to a doubt which I formerly expressed, whether it is not very rare

for these cases of pimples as they are called, to take place at an early period after vaccination, the most zealous partizan of the practice has produced only a very few instances of the kind. But the experience obtained from the very limited investigation which has as yet taken place, has established, what the candour of those I appealed to would not admit.

REFERRING to the Report of the Committee of the House of Commons, we find a volume of Evidence of persons put to the test soon after the disease was given. Different practitioners relate instances of hundreds, and even thousands, who had been inoculated with small pox, but they do not enter into any minute description of their experiments. The Committee however thought proper to admit as evidence, an Extract from the *Magazin Encyclopedique*, a French periodical publication.

“ IN the 14th number is a report of the Central Committee of Vaccine Inoculation at Paris, containing a counterproof practised on 102 children, who had previously been inoculated with the cow pox.”



“ IN this report the Committee observe, That long and constant experience having perfectly convinced them how little danger was to be apprehended from Vaccine Inoculation, nothing remained but for them to assure themselves more particularly of its preservative effect ; and to ascertain whether, contrary to the doubts which had been excited in this respect, its duration extended beyond the period of *one year*.”

“ IN order to make this experiment with all the care and all the authenticity which it merited, the Committee assembled as great a number as possible of the most eminent Medical Men, as witnesses of the fact. They here publish the result of the counterproof tried in their presence, on one hundred and two subjects who had been previously inoculated with cow pox.”

“ THE medical practitioners, whose names are underigned, being assembled in the School of Medicine, with Citizen Thouret, the director, a patient, labouring under the small pox, well characterized, was introduced, and the

matter was taken, and inserted into the arm of every individual who had undergone vaccine inoculation, by three punctures at least."

" IN 84 cases, Variolous Inoculation altogether failed. In 18 cases it produced a local effect, namely, a slight degree of inflammation, elevation, and suppuration, at the places where the punctures had been made; but there was not the least sign of fever, general eruption, or constitutional disease. This is precisely what occurs, when persons who have had the small pox are inoculated with variolous matter. Hence the medical practitioners, who had assembled on this occasion, observe, it is natural to conclude, that Vaccine Inoculation has preserved from the Small Pox the hundred and two individuals who were inoculated with variolous matter in their presence.

" PARIS, 30th Brumaire, the 10th year of the Republic."

THESE observations are strictly accurate, for it is well known to an attentive observer, that variolous inoculation soon after cow pox, produces little more than *cuticular* inflammation;

the scab whenever any is formed, is merely an incrustation, of a brown colour, which is easily rubbed off, without leaving any subsequent mark of indentation.

THIS is exactly what happened in the youngest child of Mr. Grant, who had not been vaccinated much more than a year, while in the other, there was a hard *black* scab formed, which continued for a month, and has left an indentation still to be seen, as strong as that from vaccination. And the same appearance of a hard black scab has been observed in those cases which have been recently published.

THIS appearance is acknowledged to be new, and drawings have been taken of it on account of its singularity; it is what had not before been attended to; but this same appearance was observed in the arm of Clark, the marine at Haflar, and some of the gentlemen who had witnessed that case, immediately noticed the strong similarity in Mr. Grant's child. A circumstance in itself sufficiently strong to support an opinion, that Clark had



likewise undergone the influence of vaccine virus.

THE experiments of the French Physicians, just recited, decidedly prove, that it was, in those subjects, a positive preservative against small pox for a year. The number of re-inoculations that have recently taken place in England, at a period more remote, is so nearly equal, that some comparison might be made.

IN the first instance, the French account says, that in eighty-four subjects it failed taking place. While in the present investigation here, there does not appear a single instance where it did not produce some effect or other. Even in those instances where it did not produce fever or constitutional affection, the inflammation and suppuration, in many instances, have continued much beyond what had hitherto been observed to take place at any former period. In many cases it proceeded on to ten or twelve days or more, a circumstance not very unusual in Variolous Inoculation where no perceptible fever takes

place, yet the constitution, on farther trial, has been found to resist infection. While simple constitutional affection has been observed in several, and in a variety of others it has been attended with eruptions similar to those in the case under consideration.

DR. ROLLO, a practitioner of considerable eminence, re-inoculated five children with the same small pox matter, taken on the EIGHTH day of the eruption from a disease, CONFLUENT in the face, but distinct on the extremities, the matter being at the time in a CRYSTALLINE state.

IN three of these he produced constitutional affection, and some small pustules in the areola. In both the other cases, some eruptions appeared which did not mature. From the arm of one of the first, and likewise from one of the last, he produced perfect small pox in three subjects; from whence he re-inoculated four others. In one instance there was no perceptible constitutional affection, yet the inflammation did not subside until the four-

teenth day. In the others there was fever, and some small pustules were observed in the areola.—*Report of Cases by Dr. Rollo.*

IN another instance, five children in one family were put to the test by Mr. Crockford, a Gentleman of Lewes in Suffex. These children had gone through the disease at different periods.

“ Maria Fuller	} Inoculated with	
John		Cow Pock in
Edwin		May 1800.
William		April 1803.
Ann		March 1804.”

“ THEY were inoculated with variolous matter it appears on the 5th of June 1804.”

“ ON the 13th the inflammation on the arm of Ann was gone ; on those of Maria and Edwin subsiding, but the parts contained matter, two days later there only remained on each a dry scab. In John and William the inflammation on the arms was more considerable, and lasted some days longer ; on the arm of John, very near the inoculated part, two small

pimples appeared, but no eruption besides. William had two on the lower arm, and one on the cheek, which remained out a few days, but never contained a fluid.

“ IN Edwin and Ann there was no perceptible indisposition.

“ MARIA, John, and William had some stiffness under the arm, and a slight degree of feverish heat on the seventh and eighth days after inoculation; John had the most, the inflammation at the part being the most.”

WHEN a comparison is made between these several cases and the French account, the inference is obvious, but I shall leave the reader to make his own deductions.

THESE eruptions after variolous inoculation have been denominated an hybrid disease, yet it is the same which Dr. Jenner produced by destroying the vaccine vesicle in a few hours after the appearance of constitutional affection, and he considered it then to be small pox. But of this hybrid disease I shall have occasion to take some further notice hereafter.



THE eruptions that appeared in the second case, Mr. Worsfold's child, and in the two children, Warner and Callard, whose cases are related in the Appendix, were perfectly similar to those which proceeded from inoculation, yet, arising from contagion, they cannot like them be deemed sympathetic affection of the skin.

THESE children having been frequently exposed to infection before, it has been very archly insinuated, that they slept in the same cradle with those infected with small pox, by which means they happened to have a few *local* eruptions from *contact*, similar to what is seen in those who attend small pox patients as nurses.

THOSE who are in the habit of visiting nurseries must know, that when children sleep together, their positions are reversed, for which purpose there are what are commonly called twin cradles. But allowing this objection the fullest force, that the children did sleep by the side of each other, and that the face and arms, where the eruptions were, came perfectly in



contact, yet it will avail nothing; because the eruptions were PIMPLES and not pustules, which is never the case when they are local and arise from contact. It is well known that these local appearances shew themselves sooner than is usual in the common progress of infection. They arrive at maturation quickly, and dry away before the usual period of the disease from whence they had their origin.

I most cordially agree, that, “were every human being doomed to suffer such an affection as this once in his life, instead of the horrors of the small pox, he would have no great reason to complain;” but unfortunately the succeeding case shews, that these PIMPLES may become *pustular*, and produce in other subjects true VARIOLA. Aware that this idea of local pustule might be construed into an admission too unlimited, recourse is had at last to the usual declamation, there is no proof that the children had been effectually vaccinated.

In respect to the third case, Mr. Luscombe’s child, in whom small pox was most decidedly proved to exist by repeated Inoculations from

it; I presume it will be the uniform opinion of every impartial person, that this case was of sufficient importance to claim a serious investigation. At any rate it ought not to have been treated with levity. In respect to the perfection of the Vaccine Vesicle in this child, I never had any doubt; and I still assert that she received all the advantages that Vaccination could give. The progress of the disease was correct, and the subsequent mark\* in the arm so conspicuous, that I felt no hesitation in pronouncing the child secure from small pox. This opinion was confirmed by a *long and continued* exposure to infection at a subsequent period. This ought to be satisfactory; it would have been courted as evidence before the House of Commons. I need not add more, but shall dismiss the subject with the following line from Terence:

Melius, pejus, profit, obfit, nil vident nisi quod lubent.

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\* It has lately been asserted that the mark in the arm is not a criterion from whence any judgment can be formed. By what criterion then did Dr. Jenner judge, when he inspected the arms of the children at Oxford, so as to determine which were secure from future infection, and which not?—*Vide Report of Committee on Dr. Jenner's Petition.*

IN respect to Portsmouth matter as it has been called, I do not think it will be deemed necessary for me to enter into any defence of it now : The question I apprehend will be deemed entirely at rest in future, from the several failures which have happened in other places, with matter from other sources.

DR. ROLLO's *Medical Report* contains a counterpart of every case in my publication, and notwithstanding he draws the conclusion, that "at present it remains entirely in favour of Vaccination," yet he candidly confesses, "how far time may farther influence the vaccine power, time only can decide."

THE public have been led to believe, from the arch manner in which his words have been quoted, that, in consequence of the alarm excited by my cases, he had entered upon an investigation very extensive indeed, and that *thirteen* subjects only, out of *five hundred and fifty*, had been at all affected. Whereas the fact is, his experiments extended to *thirteen only* out of the five hundred and fifty, *all* of which shewed symptoms, more or less, of susceptibility. And it ought to be remarked,

that most, if not all of these, had been previously exposed to infection, without effect. His words are—

“ It is with the greatest satisfaction to us, that it will be perceived, that of the five hundred and fifty we have vaccinated, not more than thirteen have been in any degree affected by re-inoculation, or casual exposure to variolous matter, and in these any disease induced has been extremely mild; and some doubt may arise whether it was really variolous constitutional affection or not. It is also to be recollected, many of the remaining five hundred and thirty-seven cases of cow pock have been occasionally exposed to variolous influence without effect.”

DR. ROLLO will pardon me, but this mode of conveying the result of his investigation is rather vaguely worded; hence some, from design, have taken the opportunity to misrepresent him, and thereby to mislead the public, which I am confident, from his candour, was never his own intention.



I HAVE already confessed my obligations to the Physicians of the Vaccine Pock Institution, for the very handsome manner in which they undertook the investigation; but I was certainly somewhat disappointed, when I found their experiments consisted solely of repeated inoculations; and I cannot help expressing my surprize that they should have resorted to them exclusively.

INOCULATION is not the truest or strongest test. Yet the interests of society required, and the spirit of investigation demanded, the most decided mode of setting the question at rest.

THE first action of inoculated Small Pox is on the skin; if Vaccination therefore should consist in inducing a peculiar affection of it, (and which the assimilation of the Variolous to the Vaccine pustule in all the experiments seems to indicate) it can be no just criterion, because like most other affections, simply local, it might be diminished or totally removed by time, or any other imposed morbid action.



THEY must acknowledge the wide difference there is, between inoculated and casual infection. If those who were submitted to both vaccine and variolous tests at the same time, had been kept for some *days* in a free communication with persons labouring under small pox, then the investigation would have been more compleat, and my wishes complied with; that of inoculating some, and exposing others strongly to infection.

AFTER what had been experienced at the Small Pox Hospital, early in the practice, that cow pox modified small pox, when the two operations were combined, it is almost inconceivable, why such experiments were made. In the opinion of all reasonable men, it must reduce the effective trials, more than one half; and leaves a number small indeed, for an investigation under the auspices of a public institution.

THEIR intentions were founded, I am satisfied, in the most honourable motives; but they were not called upon, to try the effect of cow pox in a constitution already vaccinated,

and perhaps they are not aware of the very important conclusion that may be made from their experiments.

FROM a long residence in a capital dairy county, and an unwearied attention, constantly directed to the subject, Dr. Jenner's opinion must be universally admitted; an authority, equal at any rate, if not superior, to that of any other person. And HE is decided in his opinion of its *reiterated* action, when communicated immediately from the animal.

WILLIAM SMITH, case IX, inserted as an instance of its resisting small pox, had the casual disease THREE times, in the years 1780, 1791, and again in 1794, and, what is not always the case, equally severe.

ELIZABETH WYNNE, case VIII, inserted as another instance of its resisting small pox; had the cow pox in the year 1759, and was inoculated with small pox without effect in 1797, but in the following year she again caught the cow pox.

MAY we not be led, by comparing their experiments with the above extracts, to conclude,

—That the virus of the casual disease is different from that produced by its passing thro' the human body.

EXPERIENCE confirms their testimony ; and in the course of the experiments, the result of which I shall state in another part, I had an opportunity of inserting some vaccine fluid into the arm of a boy I had vaccinated in May 1801, and some likewise into the hand, in imitation of the casual disease. The puncture in the arm was slightly inflamed for four or five days, but without vesication, or any other perceptible effect. While that in the hand, was much more inflamed, and there was a small vesication, containing a dark bluish fluid on the sixth and seventh days, which left a small black scab, around which was an induration of the skin, to about the extent of half an inch.

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WHEN first the investigation, lately made in Portsea, was spoken of as intended, which has been published under the STRONG title of Ex-

periments PROVING Vaccination to be a PERMANENT Preventive against Small Pox, it was generally understood among the practitioners, that a Committee would be appointed to conduct it. In the event of which, those submitted to the test, would have been equally divided between inoculation and exposure to infection. Mr. Hill, who had the conducting it, best knows the reasons why this was not complied with; and he must likewise know, because he saw them, that none of the cases which were my own patients, were the effect of INOCULATION, but the consequence of EXPOSURE to infection.

THE practitioners, in Portsmouth and Portsea, universally deplore, with him, the ravages of small pox; they likewise deplore, that they are seldom called, before it is too late to remedy the mischiefs, which often have their origin in the primary treatment. They could likewise swell his list of objects, made miserable for life by its effects.

THE many pretenders to superior knowledge in this disease, leave them very little room in-

deed to regret the extermination of small pox, could it be done. Vaccination for a length of time, even here, gave the fairest promises to effect it. Few could then conceal their opinions; but from the constant fluctuation in the science of medicine, it is not at all extraordinary, that there should be some changes, without attributing them to any dishonourable or even interested motives.



A REPORT OF SOME RECENT CASES OF SMALL-  
POX, AND SUPPOSED SMALL POX, AT PORTS-  
MOUTH, AND OTHER PLACES.

No. I.

**M**R. CALLARD's younger child, who was vaccinated on the ninth of April, eighteen hundred and three, and exposed, in April last, to the same variolous infection as the other, whose Case is related in the Appendix to my former publication, was soon afterwards sent into the country on account of weak eyes, and a disposition to atrophy. In the beginning of August last she was brought home, and immediately carried into a house, where she remained for two or three hours with a child then loaded with confluent small pox.

TEN days afterwards she became feverish, and continued so for two days, when she was taken with a violent convulsion. In a few hours, about a dozen eruptions came out in the face and body, of the same form and appearance as small pox in its first stage. The

fever immediately subsided. The eruptions did not mature, but died away, on the fifth day, with a warty scurf on the apex.

THIS could not be varicella because she had undergone that disease, and has three pits in the arms from some of the pustules.

## No. II.

ON the 19th of July, 1801, Mr. Weymouth vaccinated the daughter of Mr. Dance, a publican in Ordnance Row. The progress of the vesicle, and its termination, he says, were fully characteristic of the genuine disease. The subsequent mark is at the present time as strong as in any instance I ever saw.

IN the beginning of July last, he desired me to see the child in consequence of several eruptions which had appeared on different parts of the body; some of these were pustular, and those which did not mature, were prominent and warty.

THE child had several times been in the way of infection, but had always resisted it. She had at the present time been exposed to it,

several children in the neighbourhood having the small pox, and a child next door was taken ill the same day, the eruptions appearing at the same time, but in that child the *whole* of them matured, and stood full seven days.

It was the third day of their appearance when I first saw her. Several medical gentlemen visited her on that and the following day. From the pustules dying away, on the fifth day, many were inclined to consider it chicken pox. They were satisfied that she had been subjected to small pox, yet the quick termination of the disease led them to suspect, what might have been the case, that she might likewise have been within the influence of vari-cella. To put it however beyond the possibility of doubt, I took matter from one of the pustules.

ON the next day, I inoculated a child about five weeks old with this matter. The arm rose, and had the usual appearance of small pox inoculation, excepting that the eruptions in the areola were less distinct, and did not mature, so that the pustule was more cir-

cumscribed. On the eighth day she sickened, and after a slight fever of a few hours, several eruptions came out, all of which soon died away, excepting one on the knee, which continued until the eighth day, exhibiting at that time a glassy surface, but no matter could be taken from it.

STILL however to carry on the experiment, I took matter from the arm, and inoculated a child about seven months old. In this instance, fair, unequivocal small pox was produced, to the satisfaction of every medical gentleman who saw it, clearly evincing that the source from whence it was derived, was *VARIOLA* and not *varicella*.

### No. III.

IN answer to a question proposed by Mr. Hutchinson, of Manchester, “Whether a patient is to be considered as secure from varicellous infection, who has broken the pustule about the seventh day?” it has been said that “experience induces one to believe, that the rupture of the vesicle, at that period, by no



means lessens the security of the patient; *provided* it can be ascertained that the pustule was genuine: but it is always most prudent, in such a case, to re-inoculate the patient, lest the practitioner should have been deceived by the spurious pustule."

THE following case, where the pustule continued perfect to the *eighth* day before it was ruptured, shews that this opinion is not to be depended upon.

ON the 29th of April, 1804, Mr. Wilkinson, of Portsmouth, vaccinated two children of — Crofs, one of the Royal Artillery. Some circumstances intervened which prevented him from seeing them after the eighth day; but at that time the pustules were remarkably fine, and had every mark of the disease being perfect. Matter was taken from the eldest, with which others were vaccinated, who had a satisfactory vesicle. About the latter end of July last he was desired to see this child, when he found several eruptions on the face and body bearing evident marks of small pox, from the child being in a house where three or four



children had the disease, and having had fever, and every other symptom of infection.

ON the third day, several medical gentlemen saw the child, and were satisfied of the nature of the complaint ; yet there was a peculiar appearance in the eruptions which was remarked by every one. They were about fifty in number, and all of them were acuminated, but not above six or seven ever matured ; the rest were *horny*, and terminated in a sharp apex. Those that did mature went off early on the fifth day of their appearance. Mr. Wilkinson took matter from them and produced small pox. The other child escaped infection.

AN appearance of recent inflammation round the mark of vaccination led Mr. Wilkinson to question the parents, when he understood, that soon after he saw the child on the eighth day, the vesicle was rubbed off, and the arm was sore for several weeks. However, in the middle of the recently inflamed part, there was a perfect circular mark, with the usual indentation, which takes place after a perfect vesicle.

THIS is an instance of imperfect vaccination from the pustule being destroyed, but this was at a period of the disease, when it has been supposed to be sufficiently advanced, to have exerted its influence on the constitution, enough to secure it from any future attack of small pox.

How is the event of this case to be reconciled with the paper published by Dr. Jenner, and which is inserted as a guide in the Instructions to Regimental Surgeons?

“WHEN any constitutional symptoms occur in inoculated cow pox, they are commonly first perceptible (especially in children) on the fourth or fifth day. They appear again, and sometimes in adults, not unlike a mild attack from inoculated small pox, on the eighth, ninth or tenth day. The former arise from the general effects of the virus on the habit, the latter from the irritation of the pustule.”

Any person, implicitly following these instructions, would be led to conclude, that when the vesicle had proceeded PERFECT, so far as the eighth day, the patient would be

secure, considering *the general effect of the virus taking place in the habit on the fourth or fifth day*, to be sufficient demonstration. But it is clear, that the symptoms from irritation are as much necessary for the completion of the disease, as those which arise from its general effect on the habit.

#### No. IV.

THERE are few places in the kingdom where the practice has been more extensively adopted than at Plymouth, and it has been hitherto attended with such uniform success, that the practitioners there, who have formed themselves into a Jennerian Society, have been led to give a decided opinion, of the impossibility of small pox occurring in any subject that has been properly vaccinated.

MR. DUNNING, who is known to the world as the author of some observations, published in the year eighteen hundred, to make trial of its permanent powers, on the publication of what have been called the Portsmouth cases; inoculated some few subjects as an experiment,

in one or two of which (Mr. Rendell for instance) the same eruptions were produced, which appeared in Mr. Grant's child. On this occasion he differed from me in opinion, and drew different conclusions from these circumstances, although so similar in their nature; yet at the same time, this was done in a manner so becoming him as a professional man, that it could not fail to conciliate my esteem.

SOME persons from Plymouth spread a report here very lately, that some of Mr. Dunning's patients had taken the small pox. It was said, that it was of a very mild nature, standing only five or six days, and that the medical practitioners there gave it as their opinion, that notwithstanding Cow Pox, reasoning from these instances, would not entirely prevent Small Pox, yet it rendered it mild, and would deprive it of its fatality.

MR. DUNNING had pledged himself in his minutes, that if any instance should occur in future, he would make it public. As he had honoured me by making the investigation, and professedly published his minutes as an



answer, and as I was just then sending the first of these sheets to the press, I wrote to two professional friends at Plymouth, to enquire into the truth of the report.

THE first account I received was, that the second daughter of the Rev. Mr. Hitchings, of Stoke, near Dock, had about thirty eruptions from casual infection, which some of the practitioners there considered to be small pox, and that Mr. Dunning himself was nearly of the same opinion. This account was obtained for me by my friend Mr. Smithers from the Rev. Mr. Hitchings himself. In a few days afterwards, Dr. Thompson, of the Royal Hospital at Stonehouse, inclosed me the following communication from Mr. Dunning, with a request, that if I published it, he expected the whole to be inserted, or no portion of it.

WITH this request I most readily comply; for no man's opinion can be fairly understood from any detached parts of it: it is a mode of conduct that ought at all times to be reprobated; it is an illiberality I have great reason to complain of myself, but which my friend



Dr. Thompson was very ready to assure Mr. Dunning formed no part of my character.

“ Nov. 11, 1804,  
“ *Plymouth Dock.*”

“ Two years and a half since I vaccinated the second daughter of the Rev. Mr. Hitchings—this child was not the subject of an experiment detailed in my minutes.—Having vaccinated others from this child, I must have judged the Cow Pock to have been a perfect one. The Small Pox which were introduced by inoculation have for some time past raged very malignantly and very fatally in the village of Stoke, where this child lives; and to the action of this deadly poison she had been constantly and fully exposed. About a fortnight ago, after two days of much indisposition, (previous to which Mrs. H. for a day or two, had remarked a dullness about the child) such indisposition as is usually precursory of eruptive disease, at least forty eruptions appeared, which in their character and progress incontestably, in my opinion, resembled those small, and, if I may so call them, those artificial Variolæ which are every now and then met with in favourable cases of Inoculated Small Pox. That variolæ of the same incomplete or modified character will sometimes, but very rarely, occur in highly susceptible habits, who had been previously and duly vaccinated, under exposure to a concentrated and epidemical variolous atmosphere, I am inclined, from several late observations, to believe, but, thank God! not to fear. These which now took place in Miss Hitchings arose from casual exposure, those lately in Plymouth in Master Rendell from inoculation. The cases are in other respects both the same, serve to illustrate each other, and really place the value of Vaccination in a stronger and more prominent point of view. I repeat now

what I before said in the minutes relative to Master Rendell. That to Vaccination this child also is indebted, if not for its life, at least for exemption from very severe disease, and possibly mutilation, which in all probability would have been the lot of these fine children, had they been originally subjected by Inoculation to the influence of Variolous Poison. Casual infection, I fully believe, would have rapidly destroyed both. Subjects of this description therefore (and who can negative this conclusion, drawn from the fairest and most obvious *data*?) can only be *certainly preserved by exclusively resorting to the benign agencies of the Vaccine Principle.*

“THIS just and impartial view of Vaccination challenges and it will command the attention of every man of reflection and humanity.—The Small Pox have just destroyed four, which are all the children of a poor family in this village; several others are at this time dead and dying.—Let us, *en passant*, but for a moment contrast the melancholy and afflicting events in this single family with the few cases of Small Pox which have happened after Vaccination, and with all the consequences of all these cases. Does the aggregate of them all equal a single malignant case of Small Pox? I believe not. Indeed Vaccination preserves all for whom it is duly employed.—Far, then, from having in consequence of this case changed in the remotest degree my opinion of the usefulness and importance of the practice of Vaccination, I declare, if it could be foreseen that every other subject whom I have vaccinated, and shall hereafter vaccinate, will be liable to the same and no greater susceptibility of variolous impression than that which has appeared in Miss Hitchings and Master Rendell, looking as I do on a broad scale to the dreadful effects of Small Pox and Small Pox Inoculation, I should deem myself guilty of the most shameful negli-

gence, and culpable dereliction of professional duty, were I for a moment to slacken in my earnestness to recommend a practice which the experience of every succeeding day more and more assures me, to be a Gift of Heaven for the removal of the variolous poison from our dwellings and from our country.

“ As I can hardly add any thing with respect to the case of Miss Hitchings to what I have already said on that of Master Rendell, I did not feel it necessary to trouble the public just now with any further observations on it.

“ On the view which I have taken of these cases, which I believe to be strictly correct, and which indeed seem to me upon the whole not to differ widely from Mr. Goldson's opinions, I ground a hope that this respectable practitioner will early join us with his strong forces, and assist us in diffusing a national and universal blessing. Truly I should hail with the highest satisfaction the accession of such an ally to a cause, the great objects of which can only be obtained and secured to us by a general union and exertion of talent and benevolence. Judging from all the circumstances which have hitherto arisen in our acquaintance with the Cow Pock, it behoves, so it appears to me, medical men every where to take care that the public be prepared to meet a case now and then like those before us, rather than be alarmed by them when they occur. Certainly medical men and the friends of vaccination, have nothing ultimately to apprehend from such recurrences.

“ It is important to mention, that Mr. Hitchings asserts, in the strongest language, his determination to employ, on all occasions hereafter, Vaccine Inoculation, and to recommend it also to others with all the zeal in his power. The case in his family has already been so far advantageous, it has given birth to several more decisive experiments, uniformly conclusive in favour of Vaccination.



I need not add my belief, that accidents like those we have been adverting to, happen after the inoculated Small Pox. The case of Dr. Stewart's eldest daughter must never be forgotten in our review of these and similar events. I must mention, what I believe to be a fact, for I know nothing to the contrary, either from my own practice or from any thing I can recollect on record—That the spurious or imperfect Vaccina has hitherto secured the subjects of it against the Small Pox of a malignant or even a very confluent character.

“ RICHARD DUNNING.”

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FOR the sake of humanity and the general interests of mankind, I wish I could coincide with this opinion. I should indeed feel myself highly gratified, from the manifold advantages that must be derived to society, even if the power of Vaccination would thus uniformly modify Small Pox; and could I convince myself that it never would occur except in the mild form it did in this, and as it has done in some other children; a form divested perhaps of any very extensive infection at any rate, I should be ready to join my humble abilities to extend its benefits, and gladly cherish the pleasing idea of banishing small pox from the world.



BUT when I reflect on the degree of infection in cases that have happened under my own cognizance, and what has lately occurred in the practice of persons more conversant in cow pox than I possibly can be, when the pustules have been found even to become confluent, leaving marks as evident as if Vaccination had never taken place ; I cannot fail to view the practice in a different light ; and unless the agencies of Vaccination be better defined, I shall not be able to resist the restraint I am under at present, of entertaining an idea, that it will, at no distant period, cease to be hailed as a blessing.

#### Nos. V. VI.

THE cases of two children of Mr. Hodges, in Fullwood's Rents, Holborn, have excited general attention for some time past. Both of these children were vaccinated by Mr. Wachsel, of the Small Pox Hospital ; the eldest on the first of October 1800, the youngest on the 17th of May 1802. The vesicle in both was perfect, and they were pronounced, as having

undergone the disease in such manner as to render them, in future, secure from variolous infection. This appeared to be confirmed, from the small pox having been in the house since, when the freest communication took place with impunity.

SOME time in the latter end of August, however, the eldest child sickened, and after an illness of a day or two, more than a hundred eruptions appeared on different parts of the body, which went off about the seventh day, many of them not perfectly maturing. Notwithstanding the small pox had been raging in this court, and had in several instances proved fatal, yet the mildness of the disease, and the non-maturation of some of the eruptions, made it be little attended to; and perhaps, if the spirit of investigation had not been previously excited, if the profession had not been previously roused from their apathy, this case, like many others, would have been smothered under the convenient cloak of varicella.

BUT within a fortnight after, the other child was taken ill, and after the usual period of two or three days, an eruption came out very generally over the body, face and limbs, which proceeded to maturation and scabbing. The child on the eighth, ninth, and succeeding days, was seen by a great number of practitioners, the friends of vaccination, as well as others; most of whom were satisfied of its being real small pox. Some of the pustules ran together, though the disease could scarcely be called confluent, the eruption however was exceedingly copious; the casual swelling of the face took place, occasioning temporary blindness, with the subsequent swelling of the extremities. The child was very ill, and for some hours delirious. The scabs had not all fallen off so late as the twentieth day; and the common livid spots remained behind on the skin, with many pits.

To put the fact of its being small pox beyond a doubt, some children were inoculated with matter from the pustules, when regular unequivocal small pox were produced by it.

HERE can be no cavil, nor can any subterfuge with regard to the qualifications of the vaccinator, mode of vaccination, or the kind of matter employed, avail: The vaccinator was one of the most experienced in the practice, the matter was taken on the eighth day, and the progress of the vesicle was watched and deemed satisfactory by competent judges. In a word, they were not Portsmouth cases.

THE above account was written before the publication of the Report of the Medical Committee on these cases, from such information as I could obtain, and I see no reason to alter it.

By the report it appears, that Mr. Owen, apothecary, of Little Britain, attended the eldest through the disease, and was of opinion it was small pox. Yet the Committee say, that the case, as they have related it, stands wholly on the mother's evidence, as none of them saw the child until the scabs were fallen off. Notwithstanding Mr. Owen was taken ill, so as to be prevented attending the other child beyond the first three or four days of the



disease, yet recourse might have been had to his testimony.

IN the youngest child they observe, that “the pustules were numerous on every part of the body, mostly distinct, but in several places *coherent, though not confluent*.” I must beg leave to refer the reader to what I formerly mentioned in the case of Sarah Smith, “For while they were, in the other child, in many places confluent; yet in her, although they might be strictly said to *approximate*, yet still they were distinct, and never ran into each other so as to constitute a confluent small pox.”\* The similarity is so obvious that I need not trespass any more on the reader’s patience.

IN drawing their conclusion, the Committee say, “Some well-authenticated, though *rare* cases have been stated, in which the natural small pox occurred twice in the same person. A *few* other instances are recorded of persons,

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\* Cases of Small Pox, p. 42.

who, after having undergone the inoculated small pox, nevertheless took the disease by infection: yet these cases were not deemed conclusive against the advantages of variolous inoculation, nor do they seem to have impeded its progress." But I will leave it to their own candour to determine what would have been the effect, if so many cases had occurred within the first five or six years of the practice.

IN consequence of these cases having agitated the public mind, the committee was formed for the purpose of investigating the minute particulars of each, and of making experiments calculated to remove every doubt on the subject. Having once finished their experiments, any conclusion they were inclined to make, ought to have been confined to what was before them. Could they in any way have accounted for the appearance of small pox in these children, it was incumbent on them to have done so. But to enter into any abstract reasoning on what had, or might happen in small pox, was totally foreign to the purpose for which they were convened.

IN drawing the conclusion, therefore, they have, they appear to have been too much influenced by the prevailing rage for depreciating one Inoculation, in order to enhance the value of the other. This as a public body they ought most cautiously to have avoided. No comparison should have been made, because any deduction from their report cannot be favourable to the prophylactic powers of cow pox. While the opinion they have published, will have its influence among the lower classes of society, and cannot fail to operate to the prejudice of both inoculations. The mischief therefore that may arise, from the seeds of suspicion scattered in a soil so fertile, is almost incalculable.

WITHOUT subjecting myself to the imputation of denying the POSSIBILITY of the recurrence of small pox, I may be allowed to express my suspicions, that such failures only shew the carelessness, that too often pervades the practice. Yet these occurrences have been most industriously magnified, to advance the credit of Vaccination. While the increase of



deaths by small pox, in the several years which have elapsed since the introduction of inoculation, have been brought as an argument against its utility. But when the number of deaths in the Bills of Mortality, under two years of age, are compared with those in the other stages of life; if the practice of every medical man in the metropolis, be conducted on the same principles as that of one of the Physicians, whose name I see in the list of the Committee, it is no wonder that the mortality from Small Pox has not been diminished by Inoculation.

“ I HAVE even recommended infants to be inoculated (*vaccinated*) at the end of the month, but I never dared to recommend the inoculation of the small pox earlier than at two years of age, except under very particular circumstances.”—  
Report of Com. on Dr. Jenner's Petition, p.20.

## No. VII.

CAPTAIN SIMMONS, of the Second Somerset Regiment of Militia, now in garrison here.



has been so obliging as to favour me with the following circumstances, which occurred in the case of his daughter.

SHE was vaccinated at Bristol, with matter from an undoubted source, in January 1801, and was then about twelve months old. The vesicle was perfect in the opinion of Mr. Danvers, then the Assistant Surgeon of the Regiment, who vaccinated her, and several other medical gentlemen who saw it. Captain Simmons himself regularly marked its progress, and compared it daily with the plate of Dr. Jenner, with which it exactly corresponded. Several children were vaccinated from her, who since have resisted variolous inoculation. About the ninth day she had fever, and other constitutional symptoms.

SHE was afterwards suffered to go wherever small pox was, and in September 1803, was particularly exposed to its infection at Lymston near Exmouth, by being often with a child then under the disease, but did not take it. In the month following, she sickened for measles, and had them very bad.

IN April 1804, to try whether time had weakened its prophylactic powers, she was inoculated with small pox. The arm inflamed rapidly for the first four days, when it subsided, and in the opinion of Mr. Cartwright, of Teignmouth, who inoculated her, and other medical men who witnessed the experiment, its effect was over; but about the eighth day it became more florid, and she was attacked with fever, attended with delirium, for several hours, which was succeeded by more than an hundred eruptions, a few of which only became pustular. Matter was taken from some of these, with which three children, in Teignmouth, were inoculated, all of whom had genuine small pox.

#### No. VIII.

It has been reported through a channel, the authenticity of which I cannot doubt, that a girl of the name of Smith, in Wilderess Street, Blackfriars, after being exposed some time to small pox has taken the infection. She was vaccinated about five years since, by

a person whose opinions on cow pox frequently meet the public eye. He does not himself, I understand, deny its being genuine small pox ; but as she was under his care in the early part of his practice, when he might not have perfectly understood the true character of the vesicle, he deems it to have been a spurious disease.

THIS is rather an extraordinary defence, and few will have faith enough to place much dependance upon it ; because, from his early intimacy with Dr. Jenner, he must have been very soon admitted to a perfect knowledge of the disease ; and in his evidence before the Committee, he says, “ *It is not more difficult to determine whether a patient has had the regular cow pox, than whether a patient has had the regular small pox, provided care is taken not to interrupt the regular progress of the vaccine pustule by friction !*” And another medical person, who had inoculated upwards of ten thousand, asserts before the same Committee, that “ *He is of opinion, the spurious or imperfect sort is EASILY distinguishable from the perfect disease,*

*and that a person who has ONCE SEEN THE TRUE COW POX PUSTULE CAN NEVER BE MISTAKEN" !*

WHILE it cannot fail to be had in remembrance, that, confident of his thorough knowledge of the disease, he challenged the whole medical world to produce small pox in any whom he had vaccinated, without expressing any doubt of those who were under his care, at the time this girl was.

#### Nos. IX. X.

I AM favoured with these cases by Mr. Bowen, Surgeon, at Harrow.

HE vaccinated his own daughter about four years since, and afterwards inoculated her, without effect, with variolous matter at three several periods; the third trial was about a year ago. October 28th last she was inoculated again, with matter from a confluent natural sort, when a pustule unexpectedly formed, and she had eruptive fever for more than twenty-four hours, followed by 20 or 30 eruptions, most which died away in a few days,



but from one of them matter was taken, which produced genuine small pox.

MR. BOWEN likewise inoculated a girl 19 years old, who four years before had been vaccinated at the Institution in Golden Square. She likewise had fever, and several eruptions, most of which were on parts of the body, where her delicacy prevented him from taking matter; but, with some from the primary pustule, he produced small pox. Mr. Bowen very properly observes, such cases must occur to other practitioners, but who are SILENT on the subject.

THESE cases corroborate those before published, and support the opinion of vaccination being a security for a time, but not for ever. The accumulation of such instances preclude the idea, I presume, of their being only anomalies of constitution; and if this be allowed, they must incontrovertibly show, that the security obtained is liable to be diminished, and if diminished, why not totally removed by time, or some subsequent cause or other.

OBSERVATIONS ON WHAT WAS CALLED AN HYBRID  
DISEASE IN THE EARLY PART OF THE PRAC-  
TICE, WITH REMARKS ON VARICELLA.

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THE peculiar appearance of the eruptions in most of the cases of small pox after vaccination, leads me to notice similar appearances, which were observed at the Small Pox Hospital in London, under circumstances of previous variolation, in the early part of the practice, by the medical establishment at that public institution.

THE variolated atmosphere of the Hospital rendered it, certainly, a very improper place to make any experiments on cow pox; as most of the patients were constantly exposed to small pox during its progress. Eruptions appearing with the vaccine vesicle, at first led to the conclusion, that cow pox was sometimes an eruptive disease. But experience soon taught, that these eruptions put on the appearance of small pox, more or less, in sub-

jects who had been a longer or shorter time exposed to variolous infection.

In the course of the experiments, the following facts were established.

In those cases where the patients had been inoculated for small pox, or had been exposed to a variolous atmosphere, some days previously to vaccination, the eruptions were uniformly small pox pustules, shewing themselves *distinct, large and full of matter*, between the third and eighth day from vaccination.

WHILE, according to Dr. Willan, who attended the Hospital during the time Dr. Woodville was in Paris, when the small pox and vaccine disease had been inoculated about the same time, the eruptions were, in all the cases he saw, of the species termed Horn Pock, being *hard, and semi-transparent*.

In the first instance, the vaccine pock goes through its regular stages, and the variolous pustule in the arm, after exhibiting the usual appearance, is succeeded by a general eruption of small pox. Hence it should seem, that both diseases pass through the constitution,

and do not interfere with each other's action. For, matter taken from the vaccine vesicle produced genuine Cow Pox, while that taken from pustules on the body, never failed to produce genuine Small Pox.

IN the latter instance, when the vaccine matter had time to exert some of its influence on the constitution, although it did not totally subdue the variolous infection, yet it certainly did arrest its progress, and the eruptions were modified by it. Hence the Horn Pock, in these cases, with eruptions *hard and semi-transparent*, was denominated a *tertium quid*, or *hybrid disease*; and this for no other reason, than, because no matter could be obtained to ascertain the extent of its infectious qualities. Yet still it was small pox, modified in a constitution that had undergone imperfect vaccination.

At the same time it was observed, that although vaccination would not completely arrest infection, casually taken, yet variolous inoculation would. An opinion advanced by Mr. Birch before the Committee in the House of Commons, and illustrated by some cases



that had occurred in St. Thomas's Hospital. This he considered unfavourable to vaccination, an opinion which he holds to the present time, with a manly firmness indicative of his full conviction.

THOSE circumstances were certainly not tending to the encouragement of the practice at the beginning; but the medical establishment of the Small Pox Hospital having made their experiments under circumstances that could not fail to convict them of their error in time, the subject perhaps was not so fully investigated as it might have been. Dr. Willan expressed a wish that it might be further enquired into; but this was called a perversion of the original design of the establishment, and the clamour raised against *such useless, wanton and inhuman experiments, for the sake of gratifying idle curiosity*, occasioned it to be dropt.

BUT now, it is to be hoped that the physicians of the establishment will re-assume their experiments, and *expose for a time to natural infection* some of their vaccinated patients, that

they may ascertain, for the future benefit of society, the nature of the HYBRID DISEASE, which has been found to arise, not immediately, but at a long distance of time from vaccination, and not to suffer clamour to divert them from their purpose. Such experiments cannot now be useless, wanton or inhuman, but what the future welfare of mankind requires.

To benefit society was the original intention of the foundation, and with this view the practice of vaccination was very laudably adopted at a very early period. This was perfectly consistent with the purport of the establishment, that of lessening the ravages of small pox, by inoculation; and if vaccination be a permanent preservative, they have conferred an inestimable blessing on society; but if it be not, then, the more they have extended it, the greater is the duty they owe to the public, to declare it.

They have already aided an investigation, by inoculating several, but that is not a true test. As some recent cases therefore, strongly

tending to countenance an opinion of the insufficiency of the practice, were under the immediate inspection of one of the establishment, the eyes of the world are upon them, and they are imperiously called upon, to institute full and satisfactory experiments, so as to ascertain whether those, and other similar cases, are only anomalies of constitution, or whether they have arisen from some defect in the practice, which might be remedied by attention, or whether, vaccination is a security for a time, but not for ever.

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IF Varicella were a disease, having its origin from degenerated Small Pox, as some have pretended, Vaccination would, from what has been observed, have an influence on its eruption, and modify its appearance, but this has not been found to be the case; for this disease has been constantly seen in vaccinated children putting on the same characteristic form as in those not vaccinated.

THE character of Chicken Pox is certainly distinct from that of Small Pox, yet there are

some anomalous cases, which might be mistaken for it, when not noticed before an advanced period of the disease. The common duration of the pustule is five days, but in such cases it is often protracted to the ninth. But even when putting on this very fallacious appearance, at the beginning, it will shew such symptoms as may be deemed pathognomonic. The eruptive fever very seldom continues more than twenty-four hours, and I have never observed it to be attended with convulsions, or any other violent symptoms. The eruption appears mostly on the body, before it shews itself in the face, contrary to what happens in the small pox. At the same time they are different from variola in the general shape; some being round but more conoid than small pox, while others are oval or *angular*, and they put on the form of vesicles rather than pustules, wanting the hard base of variolous eruption. When the disease is protracted, and the vesicles become pustular, it will generally be found, that those only remain which are of the first description approaching to a Conoid.



The others, particularly those which come out with an irregular form, burst and die away.

A REMARKABLE instance of this species of the disease, happened here a few weeks since, in two children who had been vaccinated between two and three years. Many of the pustules continued to the tenth day. This induced some very respectable practitioners to suspect it was small pox; until a child who never had either disease caught it; when the vesicular appearance at the beginning was more distinctly observed.

It is said, that this similarity of chicken pox to small pox, which has occasioned it to be mistaken for that disease, has given rise to a number of erroneous conclusions, and brought considerable discredit on Vaccination.

If it shewed itself as a protracted disease, the instances could be but few, as in that form it is only a deviation from the regular disease, which does not happen so often as to afford very many cases for observation. If my information be correct, most of the cases in question, the same as those here, were deemed to

be chicken pox, not from their vesicular appearance at the beginning, but from their dying away early, and not standing the usual time of regular small pox. Inoculation could have determined the question, but that was never done.

IN short, the character of the eruption in Varicella is vesicular; while that of Variola after vaccination is *toto cælo* different. In the one, the raised cuticle is so thin, that it easily ruptures; while in the other, it appears to be thickened, so as to render the eruptions *horny* and *semi-transparent*, whence they are never liable to rupture; and from the same cause, when numerous, they may be *coherent*, but are never confluent. This circumstance likewise, when they mature, gives them a *conoid* form, which led me, together with the aspect which the vaccine action had given the inoculated pustule, in *Clark* the marine, to suppose the disease, at first, to be Varicella.

It has not been noticed, but it is a circumstance to be remarked, that the variolous ino-

culated pustule, when excited soon after chicken pox, leaves a scab similar to that which has been observed from inoculation, at a period remote from cow pox, having more the appearance of vaccine than variolous action.

ON THE DIFFERENCE BETWEEN THE CASUAL AND  
INOCULATED COW POX, IN RESPECT TO COLOUR  
AND APPEARANCE.

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AFTER its having been admitted, that according to Dr. Jenner himself, the natural disease in the animal is of a palish blue, approaching to livid ; it may be deemed extraordinary, that I should hesitate to advance, that the BLUE TINT is the characteristic appearance of the pustule on the nipple of the cow. But so very different is the conduct pursued by some of the advocates for vaccination, from what is adopted in most other controversies, that they may be led, perhaps, to contend it never was his intention to convey an idea of its always being the case ; as the expression made use of by himself may not admit a conclusion so extensive. It will therefore be necessary to attend to his own words. “ At their first appearance they are *commonly* of a palish blue, or rather of a colour somewhat



approaching to livid, and are surrounded by an inflammation." At the same time it ought to be remarked, that almost immediately afterwards, when speaking of pustules in the animal which may be mistaken for the real cow pox, he observes, " They are *always* free from the bluish or livid tint *so conspicuous* in the pustules in that disease." If this colour, therefore, be so far uniform, as to be considered a guide to distinguish the true from the spurious disease, I hold myself at liberty to advance, on his own authority,—

THAT A BLUE TINT IS THE CHARACTERISTIC APPEARANCE OF THE COW POX PUSTULE ON THE NIPPLE OF THE ANIMAL.\*

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\* This was written prior to the publication of Mr. Dunning's pamphlet. He wrote, it appears, to Dr. Jenner on the subject. His answer proves, that I was not diffident without some reason. The reader will compare his account of the disease in the animal in 1804 with that which he gave in 1798. " *I have seen blue tints, and white tints, and amber colour tints* on the cow, and immediately from the cow, over and over again.—On the 10th, 11th, or 12th day, it is not uncommon to see the blue tint on the human arm; nor is it *uncommon* to see the cow pass through the disease without any *blueness* about the pustules on the teats."

FOR some length of time after the publication of his Inquiry into the Causes and Effects of the Cow Pox, it was an opinion universally adopted, that the disease, when taken casually, partook of the same characteristic mark ; a circumstance strongly impressive, that the virus secreted was of a nature similar to that which had been accidentally inserted.

THIS idea maintained its ground, until Dr. Woodville, finding that the virus, secreted in the inoculated disease, wanted this conspicuous colour, gave it as an opinion, “ that arguments wholly founded upon the strict analogy between the inoculated and casual disease, must be considered as inconclusive.”

IN answer to this it was declared, that the idea which had been so generally received, was erroneous, having no certain foundation in fact, as the blue or livid colour “ is neither always met with in the casual, nor always wanting in the artificial disease.” And the following arguments were opposed to this objection of Dr. Woodville.

“ As to the blueness of the pustule, which Dr. Woodville considers as a diagnostic of the casual disease, it arises from the greater degree of irritability, vascularity, and exposure of the parts affected; and is neither always met with in the casual, nor always wanting in the artificial disease. I have repeatedly seen it when the pustule of an inoculated patient has been injured by pressure or friction, to which the pustules in the casual complaint are constantly exposed; and in one instance which I saw, where a medical man inoculated his thumb by accident, Dr. Jenner told me, that it exactly resembled the casual disease.

“ Hence also it appears, that arguments wholly founded upon the strict analogy between the inoculated and the casual cow-pox, ought not to be considered so inconclusive as Dr. Woodville imagines. Yet Dr. Jenner’s arguments are not wholly founded on analogy; they rest also on the solid foundation of well-established facts.”

“ Among other arguments urged by Dr. Woodville, to prove that the casual and artificial cow-pox differ, one was, ‘ that the local affection in the former case constantly exhibits a dark blue colour; an appearance which the inoculated disease never assumes.’

“ When Dr. Woodville made this assertion, he did not recollect the following passage in his former publication. It occurs in the forty-fourth case. ‘ He had been inoculated in the hand, as well as in the arm, in order to discover if the appearance of the tumour, in a part constantly exposed to the air, would be the same, as in the arm kept covered by his dress. *The difference was very evident; for the tumour upon his hand was much more extensive, of a more livid colour, and attended with more inflammation than the other.*’

“ Dr. Woodville is not only inaccurate in saying, that the colour in the artificial disease is never the same as in the casual; but in his description of the colour of the casual cow-pox; which, he says, is constantly of a deep hue. Dr. Jenner, who must be allowed to have seen it much more frequently, says, that it is of a colour *distantly approaching to blue*; and that the natural disease in the animal is of a *paleish blue*, approaching to livid.”

Hist. of Cow Pox, p. 137 and 143.

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HAVING adverted to this opinion of Dr. Woodville, that the pustule in the casual disease has a bluish tint, which is retained in the first vaccination, but is not to be distinguished after it has once passed through the human body; I expressed myself, that it was a circumstance of some material import, but which had not been sufficiently attended to.

FOR, if the matter secreted, either in the casual or inoculated disease, differs so very materially, as to lose that colour which is so characteristic, and distinguishes the pustule in the animal from any other infection; may we not be led to conclude, that it has lost some of those peculiar properties which the parent virus might have possessed? This must be evident to the most superficial observer, and can-



not fail to excite that attention, which even now I think it has not sufficiently obtained.

With whatever degree of contempt it might have been thought proper to treat this objection, yet it appears to have excited more than usual hesitation, as it is not thought sufficient to rely on what was at the time deemed a refutation of Dr. Woodville's opinion; but, in order to remove any doubt that might still remain, Dr. Jenner was written to on the subject, and an answer was received to the following purport:—

“ DR. JENNER and Mr. Henry Jenner have inoculated several persons in the usual part of the arm, with matter immediately from the cow; and both declare, that the blue-tinted pustule is not more frequently excited by such matter, than by matter regenerated in the human subject.”

MR. TANNER, the Veterinary Surgeon, was also written to, “ whose opinion coincided with that of Dr. Jenner, and Mr. Henry Jenner; that the cow pock produced by inoculating with matter from the cow, sometimes

appears of a bluish cast, and sometimes otherwise, in the same manner as it does when the virus is transferred from one human subject to another."

THE sixteenth case related by Dr. Jenner in his Inquiry, which was casual cow pox, is brought as a case in point. "In this case, there was a pustule of a livid hue on the back of the hand, and two on the wrists, which were free from that colour."

THE seventeenth and nineteenth cases, which were inoculations immediately from the cow, are likewise adduced. "In the first, the pustule was rather livid; but in the latter, it was free from tint. Hence," it is said, "it appears evident, that no argument can be drawn from the colour of the pustule, of the superiority of matter from the cow: but, perhaps, Mr. Goldson thought this an *argumentum ad hominem*, when he addressed himself to that silly animal, John Bull."

FROM whence this compliment to a liberal public came, whether from the correspondence

of Dr. Jenner, Mr. Henry Jenner, or Mr. Tanner, is not very material ; but at any rate, after having paid a handsome price for a commodity, a man ought not to be denied the privilege of looking at his bargain, and endeavouring to ascertain whether it be worth the money he paid for it or not.

THE three cases here mentioned are on record, I shall therefore insert them, that the reader may judge what foundation there is for the inferences I shall draw from them.

“ CASE XVI. SARAH NELMES, a dairy-maid at a farmer's near this place, was infected with the cow pox from her master's cows in May 1796. She received the infection on a part of the hand which had been previously in a slight degree injured by a scratch from a thorn. A large pustulous sore and the usual symptoms accompanying the disease were produced in consequence. The pustule was so expressive of the true character of the Cow Pox, as it commonly appears upon the hand, that I have given a representation of it in the annexed plate. The two small pustules on the wrists arose also from the application of the virus to some minute abrasions of the cuticle, but the livid tint, if they ever had any, was not conspicuous at the time I saw the patient. The pustule on the fore finger shews the disease in an earlier stage. It did not actually appear on the hand of this young woman, but was

taken from that of another, and is annexed for the purpose of representing the malady after it has newly appeared."

"CASE XVII. The more accurately to observe the progress of the infection, I selected a healthy boy, about eight years old, for the purpose of inoculation for the Cow Pox. The matter was taken from a sore on the hand of a dairy-maid, (*from the sore on the hand of Sarah Nelmes*) who was infected by her master's cows, and it was inserted on the 14th of May, 1796, into the arm of the boy by means of two superficial incisions, barely penetrating the cutis, each about half an inch long."

"On the seventh day he complained of uneasiness in the axilla, and on the ninth he became a little chilly, lost his appetite, and had a slight head ach. During the whole of this day he was perceptibly indisposed, and spent the night with some degree of restlessness, but on the following day he was perfectly well."

"THE appearance of the incisions in their progress to a state of maturation were much the same as when produced in a similar manner by variolous matter. The only difference which I perceived was, in the state of the limpid fluid arising from the action of the virus, which assumed rather a darker hue, and in that of the efflorescence spreading round the incisions, which had more of an erysipelatous look than we commonly perceive when variolous matter has been made use of in the same manner; but the whole died away (leaving on the inoculated parts scabs and subsequent eschars) without giving me or my patient the least trouble."

"CASE XIX. William Summers, a child of five years and a half old, was inoculated the same day with Baker, (March 16, 1798) with matter taken from the nipples of one of the infected cows, at the farm alluded to in page 32.



He became indisposed on the sixth day, vomited once, and felt the usual slight symptoms till the eighth day, when he appeared perfectly well. The progress of the pustule, formed by the infection of the virus, was similar to that noticed in Case xvii, with this exception, its being free from the livid tint observed in that instance."

I HAVE been accused of asserting, without any sufficient authority, that there certainly is a difference in the appearance of the pustule in the casual and inoculated diseases, as in the one, it is more prominent than what it is in the other. It is however allowed, that, in Sarah Nelmes, the pustule on the back of the hand was large, but which appears to have been occasioned by the patient receiving infection in a part previously injured by the scratch of a thorn.

WHILE the two pustules on the wrist, which were caused by the reception of virus in parts where there had been minute abrasions of the cuticle, were neither larger, nor more prominent, than pustules excited in an artificial way, by puncture.

THERE can surely be but little distinction between the *slight* scratch of a thorn, and the

puncture from a lancet ; this, however, is very little to the purpose, because had I no other authority for what I advanced, the case quoted will be fully sufficient until Dr. Jenner shall think proper to contradict what he has published.

THE case alluded to is illustrated by an engraved plate, and the expression made use of ought to be attended to :

“ THE pustule was so expressive of THE TRUE CHARACTER OF THE COW POX, AS IT COMMONLY APPEARS UPON THE HAND, that I have given a representation of it in the annexed plate.”

Now, if the pustule in this instance, which is so conspicuously brought forward as an impressive example, had the appearance represented in the plate, from what better authority can the inference be drawn, that, there certainly is a difference in the appearance of the pustule, and that in the casual it is more PROMINENT than it is in the inoculated disease.

THIS will be the more readily seen, when the Plate No. 1, is compared with that of No.

iv. The latter exhibits three pustules, as they appeared in the arm of Hannah Excell, case XXI, who received the infection from the insertion of the virus under the cuticle of the arm in three distinct points. These differ as to dimensions, prominence, and colour, so as to make the contrast the more remarkable; but it is observable, that they have a strong similarity to those on the wrist in Plate No. 1; and these wanted the livid tint of that on the back of the hand, which is given in the engraving as being strongly expressive of the true character of the casual Cow Pox.

AND in the subject of the next case, the boy who was vaccinated in the *arm*, with matter from the blue-tinted pustule on the hand of this patient, the colour of the original virus was scarcely retained, if we are to judge from the account, that it assumed *rather* a darker hue than what is commonly produced by variolous matter.

As the disease in Sarah Nelmes exhibited two distinct appearances, it would have been

desirable to have seen the effect of vaccination from the two pustules on the wrist. And this for a very obvious reason. The Cow Pox is accurately observed, and is better known in Gloucestershire than in any other part; and “beyond the memory of any persons living it was UNIVERSALLY believed, that the person who has been affected by it is for EVER after secure from the infection of Small Pox, neither exposure to the variolous effluvia, nor the insertion of matter into the skin, producing that distemper.” Yet I am accused of “reviving the ridiculous notion of the *old women in that county, that the Cow Pox is a TEMPORARY preservative against the Small Pox.*”

THE prevalence of this ridiculous notion in Gloucestershire, contradicts the evidence of its being *universally* believed there, to be a permanent preventive. This is a circumstance, not only new, but surely not much to the credit of vaccination; and if, as it appears by this case of Sarah Nelmes, that the casual disease is capable of producing two distinct kind of pustules from the same infection, we may



be led to conclude that those cases which have given rise to those old womens opinions, have originated from pustules similar to those on the wrist, and not from such as are represented on the hand. Perhaps the following case might have been Cow Pox from the same source.

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AN INSTANCE OF NATURAL SMALL POX, EIGHT YEARS SUBSEQUENT TO WHAT WAS DEEMED CASUAL COW POX.

**I**N the month of July last, Joseph Stone, a private in the First Somerset Regiment of Militia, in garrison at Gosport, sickened for Small Pox; as this man was supposed to have had the Cow Pox some years before, the circumstance occasioned much conversation, and he was visited by several medical gentlemen in the neighbourhood.

THE account he gave of himself was, that eight years before, he lived as a servant with a

Farmer Edwards, at Liddington Wick, in the northern part of the county, and was employed as a milker in the dairy. That during the time he was there, he contracted the disease, with which he was very ill for several days; and the marks from the pustules are still visible on his fingers. Under an idea that he should never take the small pox, he had attended persons in that disease, and since his being in the regiment, he had been in some instances employed for the same purpose, without taking the infection.

I was prevented, by severe illness at the time in my family, from seeing him myself; but by the account I have received from several gentlemen who did see him, there can be no doubt of its having been Small Pox; while the appearance of the eruptions seem to leave little room to doubt of the disease he had eight years before, being Cow Pox. Like the cases in Fullwood's Rents, the pustules were very numerous, and the usual swelling of the face, attended with blindness, ensued. But yet, notwithstanding their great number, they were

distinct; and although they might be said to be coherent, yet, excepting one or two on the hand, they were not confluent.

To ascertain the truth of his having had the casual disease, Lieut. Col. Leigh, who permits me to make use of his name, wrote to Farmer Edwards, and received an answer, assuring him, that he certainly had the Cow Pox, while in his service about eight years since, and Mrs. Edwards, his wife, caught it at the same time. This corresponds exactly with the man's own account; and as the disease is well known in that part of the country, adds credit to the circumstance as a fact.

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It has likewise been reported, that an old man, who was infected with the casual disease many years since, has lately had the Small Pox, in the Small Pox Hospital. I cannot vouch for the truth of this account, but Dr. Woodville and the other medical gentlemen of the establishment can easily ascertain it.

ON THE EFFECT OF VACCINATING IN THE HAND,  
IN IMITATION OF THE CASUAL DISEASE.

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IT has excited some astonishment, that the powers of Cow Pox should have remained so long unnoticed, when we consider that it has been so well known in the dairy counties during the last century; yet this has been remarked to be the case with many other important facts, received for ages as vulgar opinions, but neglected, until some fortuitous event or other has led to their investigation; when every one has been surprized, that such little sagacity should have been requisite, to carry ideas so familiar into general practice.

It was the fortune of Dr. Jenner to be placed in a situation, where he must daily witness the truth, or soon detect the fallacy of its securing the human constitution from small pox. But when experience taught him, that this was not to be reckoned among what are



called vulgar errors, the idea of carrying it into practice was so natural, that it could not long escape his discernment.

With this view he published his Inquiry into the Effects of the VARIOLÆ VACCINÆ; but at that time he had very little experience in the practice he proposed. The publication, however, as might be expected, met with a number of warm partizans as soon as it was announced; but their conduct has been observed to be as novel as the disease itself. In most other discoveries, time has been found necessary to bring them to maturity, while Vaccination was deemed perfect the instant it was promulgated. Any innovation was most arrogantly decried; and before the practice had been known in the Metropolis more than three years, the zeal of some few persons most importunately solicited the signatures of the London practitioners, to express their conviction of its PERMANENT preventive powers! Whoever refused their assent, prudently wishing to wait for more experience, were accused of sacrificing the welfare of society to their

own individual interests; while, it is to be remarked, the TWO COLLEGES OF PHYSIC AND SURGERY HAVE REFUSED THEIR SANCTION TO THE PRACTICE, EVEN TO THE PRESENT DAY. This is an inconsistency, that can only be equalled by the effrontery with which the testimonial of 1801 was produced, as an answer to objections urged against its permanent security three years afterwards.

PARLIAMENTARY remuneration soon succeeded this eleemosynary testimonial. The Committee, as I have before had occasion to remark, could not have decided otherwise from the general tenour of the evidence before them. The want of some communication from the two professional Colleges, is the only defect that can be found in the Report; and it cannot be asserted that their opinion was not necessary. It must certainly have had more weight than any individual testimony, however respectable. This circumstance, when compared with the insertion of the proceedings of a foreign public body, from no other authenticated source than that of a periodical

journal, must be too striking to need any further comment.

ROYAL patronage kept pace with parliamentary munificence, and a Society was soon established under the denomination of ROYAL JENNERIAN. Why individuals, basking in the sunshine of favour, soon forget their origin, can easily be imagined; but it cannot readily be accounted for, why the same disposition should prevail in a public body; yet, when called upon to make a further investigation of the agencies of Cow Pox, they deny themselves to be a VACCINE INSTITUTION.

AWARE that the subject was not yet exhausted, and having been by experience taught, that there must be some defect in the present mode, I proposed vaccinating in the hand, in imitation of the casual disease.

THIS idea was not advanced without some consideration, and the arguments, which at that time I made use of, were derived from Dr. Jenner's public opinions. He had remarked, in page 55 of his first publication, that "as it is not the identical matter inserted which is

absorbed into the constitution, but that which is, by some peculiar process in the animal economy, generated by it, is it not probable *that different parts of the human body may prepare or modify the virus differently?*''

IN this observation he had in view, the different effects of matter when deposited on the cutis, or on the adipose or mucous membranes; but as the hands, from their being the more immediate instruments of the organs of feelings, have a peculiar disposition to irritation; which was instanced in the simple cutaneous paronychia, or any small puncture producing inflammation, I was induced to infer, That the casual might possess effects more decidedly permanent than the inoculated disease, from the virus being deposited on a part of the body, where the skin, from its sensibility, is more capable of giving the necessary stimulus to the particles than any other.

If vaccination therefore, in the mode I proposed, should produce pustules partaking of the colour so conspicuous in the animal, and which is almost uniformly seen on the hands;



of the milkers in the casual disease, the same effects I conceived might be accomplished.

WHEN I first entertained this idea, I could not venture to contend for its being more effectual than the usual mode in the arm, thinking then, with Dr. Woodville, that the characteristic colour was lost after the first remove from the animal. I have since seen sufficient reason to alter that opinion; and I now presume that it will generally be found to preserve the livid tint on the hand and fingers, although it is almost uniformly lost, even when the matter is taken from the animal itself, if inserted in the usual place.

THE arguments that were formerly intended to refute Dr. Woodville, will, in two instances, go a great way to illustrate my position. In one, a medical man inoculated his thumb by accident, when, in the opinion of Dr. Jenner, who saw it, *it exactly resembled the casual disease*. In the other, the subject of Dr. Woodville's forty-fourth case, vaccination took place in the hand, as well as the arm, in order to discover if the appearance of the tumour, in a

part constantly exposed to the air, would be the same as in the arm kept covered by his dress. The difference was evident. The tumour on his hand was much more extensive, *of a more livid colour*, and was attended with more inflammation than the other.

THESE are two remarkable instances brought forward to illustrate a very different hypothesis, viz. That the livid colour arises from pressure, or the action of the air, both of which the pustules in the casual complaint are constantly exposed to.

BUT may I not venture to conclude, that it rather arises from the matter being deposited on a part of the body, where the skin, from its sensibility, is more capable of giving the necessary stimulus to the particles than any other?

THE correspondence which has so recently taken place with Dr. Jenner, Mr. H. Jenner, and Mr. Tanner, was commenced with an intention to shew, “ that the blue-tinted pustule is not more frequently excited by matter from the cow, than by matter regenerated in

the human subject." This was done, the more effectually to obviate the objection, first started by Dr. Woodville, and now renewed, "that the casual and inoculated diseases differed in their appearance." But there is no analogy in the experiments. They should have been conducted so as to imitate the infection as taken by the milkers, instead of which, the matter, immediately from the animal, as in the artificial disease, appears to have been inserted into the arm. This cannot be a casual disease, because the circumstances are not similar. What are the consequences? The same kind of pustule is produced as in the artificial disease, instead of the *conspicuous, characteristic* appearance, both in the animal and when accidentally transferred to the milker.

If the virus therefore, in its first remove, and consequently in its most perfect state, will not produce its own similitude, when inserted into the arm, while that which is derived from its reiterated re-production has that effect when inserted into the hands; what inference can be drawn from such experiment? Does it

not lead to the conclusion, that, “ from some peculiarity in the secreting surfaces, the virus is differently assimilated ?”

It was to ascertain the effect of exposure to the air, that vaccination took place on the hand, but I am not inclined to attribute the result to that cause. The vascularity of the parts may indeed, in some degree, be connected, as the effect most probably arises from irritability, in which case the ramifications of the vascular system become the more numerous, and the absorbents multiplied in proportion.

HAVING here dwelt somewhat upon analogy, I think it necessary to remark, that I have very unjustly been classed with the real enemies of vaccination, from my having before observed, that as there is no perfect analogy between the Small and Cow Pox, time only can decide whether the effect of the latter is permanent.

ON this occasion the following remarks of Dr. Moreau, of Paris, are introduced. “ That it is not necessary to prove the two diseases to



be exactly similar, because different causes sometimes produce the same effect; and that the laws of the animal œconomy are only to be learned by experiment and observation; and that all the fine spun theories which say to nature, Hitherto shalt thou go and no further, are to be considered as the phantoms of imagination, and the follies of a day."

To the most unbounded extent of the operations of nature I can most willingly subscribe; and I may admit that it is not necessary to prove the two diseases to be exactly similar; but will it be denied me, that variolous inoculation uniformly produces a pustule whether in the arm, hand, or any other part of the body, perfectly similar to the pustule from which it was taken?

Now if this be admitted, and I have little fear that any one will be bold enough to deny it, will Dr. Moreau, or any other physician at Paris, or any other place, contend that the same analogy should not take place in the vaccine pustule, to render it permanently effective?

THE result of those cases which have been published, where accidental vaccination took place in the hand, excited my attention. I could not but consider it very desirable to ascertain, whether the appearances were accidental, or the constant effect of such mode of vaccination. Considering that the greater part of the inflammation to be apprehended, arises from irritation at an advanced period of the vesicle, and satisfied that this, when properly attended to, might easily be subdued; notwithstanding all the predictions of abscesses, contractions of the fingers and numerous other evils, I have ventured to imitate the casual disease, by inserting the matter into different parts of the hand and fingers. The following experiments shew the result.

#### No. I.

WITH matter, obtained by Mr. Wilkinson of Portsmouth, on glass, from the central house of the Royal Jennerian Institution in Salisbury Square, I made the first experiment, by inserting it into the outer part of the left hand

of Master P—, a child about fourteen months old, between the thumb and fore finger, and in the usual place on the other arm. This experiment failed in both places, a vesicle of one cell only was produced, which burst early on the fourth morning.

THIS was an unlucky beginning, yet I had the satisfaction to find, that the inflammation was not to be dreaded, as even in this spurious case, it was not greater in the hand than in the arm, notwithstanding the vesicle there was twice as large, a circumstance which afterwards I found to be uniformly the case.

## No. II.

WITH some of the same matter, Mr. Wilkinson obliged me by vaccinating, in the same manner, two marine recruits just then brought to quarters. Both in colour and size of the vesicle, the difference was evident. On the hand it was nearly twice as large as that on the arm, which was of the usual size. At the same time it was prominent, while the colour was remarked to be a dingy white, which to-

wards the edges exhibited a slight tinge of blue, varying very perceptibly from the vesicle on the arm.

THE inflammation succeeding was not more than common, there was some degree of fever more than usual, pain in the axilla, towards which, the lymphatics were to be traced by a slight redness for a few hours. One of them rubbing off the vesicle about the eighth day, we were prevented from seeing the progress, but until then there was no apparent difference.

### No. III.

WITH matter taken from the *hand*, on the very beginning of the ninth day, I immediately vaccinated Miss W—— in the arm, and in the palm near the fore finger of the opposite hand. The child was two months old.

THE appearances in this case were the same as took place in the last. The inflammation, during the progress of the vesicle, was not more than is usually seen; but about the twelfth day the child bruised the part, and



prevented the scab from forming. Irritation now caused an exacerbation of the inflammation, which was at that time rather subsiding. This, however, readily gave way to a little Ungt. Hydr. fort. without any trouble. The child was more restless and feverish than is usually observed in children of that age, and the progress of absorption was faintly perceived in some few spots on the arm; this was however so slight, that had we not been prepared to look for it, would not have been observed.

#### No. IV.

WITH matter taken from the *arm* of this child I vaccinated a child of Mr. Matthews', on the Point, about six weeks old. This was done on the outside of the hand, between the fore finger and thumb, the same as in Nos. I and II.

IN this case, likewise, the vesicle was very different from what is seen in the arm, being much larger, more prominent, and tinged with blue, which was most conspicuous on the

tenth, eleventh and twelfth days. The child was rather feverish and restless from the eighth to the eleventh day. The areola was well defined. The axilla was tender for three days, but the inflammation was never so much as is sometimes seen in the arm.

MR. SHEPHERD, Assistant Surgeon to the Third Lancashire Regiment, in barracks here, was so obliging as to comply with my request, and to try the experiment on three children in the regiment.

#### No. V.

IN the first instance, the child, about a year old, being rather restless, he made three very small punctures close to each other, between the thumb and fore finger. All of them took effect, and becoming confluent, a triangular vesicle was formed. This was very prominent, and different in colour and appearance from that which was produced in the arm from the same virus. It exhibited a margin of a bluish cast, the middle being of a dingy white. The child had fever for two or three days, but the

inflammation was never so great, as to require any application to suppress it.

#### No. VI.

THE subject of this experiment was vaccinated in the same part, and a vesicle was produced exactly resembling, in the opinion of every gentleman who saw it, the vesicle on the hand of Sarah Nelmes, as represented in the Plate No. 1 in Dr. Jenner's first publication, inserted as an illustration of casual Cow Pox; while the vesicle in the arm was of the usual size and appearance.

#### No. VII.

IN this experiment, the virus was inserted under the cuticle, on the inner part of the second joint of the fore finger, and in the opposite arm. A vesicle was produced twice as large as that in the arm, and the difference was decidedly marked from the beginning. On the fifth day, it resembled the small pustule on the fore finger in the plate just alluded to. And from the ninth to the thirteenth, the whole of

it appeared perfectly livid. The child was feverish for two or three days, but never so much as not to play about. The inflammation was nearly the same as in the other cases. The child was about eighteen months old.

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SHOULD I have occasion to repeat this mode of vaccination, which, from the experience of these cases, seems to promise a more certain method of producing constitutional affection, I should prefer the middle joint of the ring finger, as the part least exposed to friction.



## FACTS AND OBSERVATIONS SUBMITTED FOR IMPARTIAL INVESTIGATION.

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**H**AD the former cases been answered, I should not have troubled the reader again on the subject. Argument might have convinced me, and I should have felt myself bound to have acknowledged my error; but illiberal abuse has only confirmed my doubts, and given reason to suspect something wrong in the practice, which it is vainly intended to conceal. For if the practice were as perfect as it is pretended to be, then any opposition, however formidable, would only establish it on a basis more permanent; and there would have been no want of argument to support it. My objections must long before now have been buried in oblivion. Yet this has not been the case; the pernicious pamphlet, as they were pleased to term it, has survived their clamour, and counterparts to the cases

have been seen frequently occurring, a circumstance shewing some defect or other. I have therefore a right to claim the merit of opening the ears of the public to a truth, which so nearly concerns their interests.

If the degree of security depend on the degree of vaccination, the public have a right to demand some criterion to determine, when imperfect vaccination ends, and when perfect security begins. It would have been decorous in Dr. Jenner to have given some such criterion. But I cannot consider a few loose observations on the effect of inoculating in a diseased state of the skin, inserted in a public journal; or the vague hints from other quarters, that a spurious disease may be a security for a time, to contain any thing satisfactory. I have therefore thought it a duty I owed, to inquire into the subject. The following observations are the result, which, in the present state of the question, I have not the vanity to suppose can be perfect; they are only submitted as ideas for candid investigation, which time and further experience alone can establish.

SMALL POX is an eruptive disease, the contagion of which has the property of assimilating the fluids to its own peculiar nature. This is produced in some degree by the action of the eruptive fever, but not wholly effected, until the eruptions which succeed it have made their appearance. This must chiefly depend on the state of the skin. Indeed it was the theory of Dr. Cullen, that the difference between distinct and confluent Small Pox, depends on this circumstance alone.

“ THE causes which determine more of the variolous matter to pass by perspiration, or to form pustules, are probably certain circumstances of the skin, that determine more or less of the variolous matter to stick in it, or to freely pass through it. Cullen’s First Lines, DXCVIII.

IF these circumstances in the skin vary, so as to admit of a greater or less degree of eruption in different subjects, may they not become so far active in some, as to prevent any eruption at all? And may we not with great probability deduce from hence the reason why some few, notwithstanding repeated

exposure to variolous influence, pass through the whole of their lives without infection?

I KNOW this insusceptibility has been supposed to have arisen, from the contagious principle having, at some period or other, produced fever, which had so far assimilated the fluids as to prevent its future action. But there have been repeated instances of persons, equally as much exposed to infection, who have passed through great part of their lives without taking the disease, but who have been found to be susceptible of it at a more advanced period. This peculiarity can only be solved on the principle of the former resisting power in the skin having been diminished or perhaps totally destroyed by some unknown cause or other, but which had never been applied to it before.

IN what this property in the skin to resist small pox consists, when not proceeding from the action of small pox itself, will for ever, perhaps, remain concealed. It is one of those inscrutable operations of nature, which is placed beyond the sphere of our narrow capacities. In



respect to that which is produced by small pox itself, I have for a long time entertained an opinion, that variolous fever alone, without the expulsion of morbid matter in the CASUAL disease, will not prevent the future action of variolous infection. The necessary powers of resistance in the skin, it appears to me, cannot take place without the intervention of something on the surface, secreted in consequence of eruptive fever.

To explain this, I will relate a case which happened to me some time since.

I WAS desired to visit a boy, about seven years of age, of a weakly constitution, and bilious habit. I understood that he had been ill for two or three days, with some considerable degree of fever, whence his friends supposed he was sickening for the small pox, having been exposed for some time to a variolated atmosphere. Several blotches had appeared the day before, which alarmed them, and occasioned me to be sent for. These were mostly confined to the anterior part of the legs, and were of an erysipelatous, or rather erythema-

tous nature ; the same disease was incidental to several children about the same period.

IN two or three days the fever subsided, from the use of antimonial medicines, and keeping the bowels open, while the appearances on the legs were at a stand. A corroborating plan was then adopted. But after an interval of three days, what appeared at first to be an exacerbation of the fever suddenly took place, and I expected to see the disease on the lower extremities increase ; but in this I was mistaken. The symptoms were such as usually precede eruptive diseases, and there were strong indications that convulsions would ensue. After two days, forty or fifty eruptions shewed themselves, having every characteristic mark of small pox in its first stage. All the symptoms were immediately relieved, but the eruptions never came to maturation, going back on the fourth day, when the boy was perfectly well, excepting his legs, which were troublesome for ten or twelve days longer, the skin being discoloured, and considerably thickened for some time after-

wards. There appeared to be no infection, as two children, constantly with him in the same house, did not take it. But all of them were infected six months afterwards, and had the disease severely.

THIS I consider an instance of small pox eruption, impeded in its progress, from a prior affection at that time existing in the skin.

It might be objected, that it sometimes happens in inoculated small pox, the constitution is secured by fever alone, without any eruption taking place. Yet it should be recollected, that the same virus which is secreted from eruptive fever, is applied immediately to the skin, and the same effects are produced by the absorption from the arm, which is to all intents and purposes as much a pustule, as if it had arisen from the effect of eruptive fever.

THE fever of inoculated small pox, therefore, seems to be analogous to the secondary fever of the casual disease. In the one, the skin has undergone a partial change, prior to the assimilation of the fluids; while in the other, the stimulus, that must be given to ef-

fect the necessary change in the skin, is derived from the expulsion of the morbid matter, subsequent to the fluids having undergone such alteration. Hence may be derived the difference between the inoculated and casual disease, independent perhaps of any effect from peculiar treatment.

SOME cases, not totally dissimilar to that I have just related, are quoted by Dr. Macdonald, in a paper in the Medical Journal for October last. This paper contains some observations that would claim more attention, were they conveyed with that degree of moderation, *which should ever accompany a philosophic research.*

IN the preceding instance, the eruptions were elevated, and hard, with a circumscribed base, but the cuticle was in no instance detached; they might be said to go back, rather than what is commonly called turn off. From this circumstance, there could be no expulsion of morbid matter; if there had been, the boy would have been rendered unsusceptible of the disease in future. For it should seem,



that any exudation of lymph, the first secretion, and the most active, in small pox, forming a warty protuberance in the cuticle, may render the patient secure; although the eruptions do not mature, but terminate in a few days; there having been many instances where persons, in families in which the small pox has prevailed, have had slight fever with a few such eruptions, but who, not being satisfied, have been inoculated without effect. Here the morbid lymph had been expelled, but from some peculiar state of the skin the eruptions were prevented from maturing.

THE same appears to be the case in this new hybrid disease, both at the time of vaccination, and at a remote period from it; for the warty scurf on the apex of the eruptions seems to be the effect of the morbid lymph, which it is necessary should be expelled, in order to render the constitution free. Worsfold's child, No. 11 of the former cases, was afterwards exposed to small pox, and has since been inoculated, but without effect. But it is worth remarking, that the arm put on the usual appear-

ance of inoculated small pox, in a person who had already undergone the disease; inflaming rapidly, but dying away about the fifth day; never shewing that peculiar mark, which has been observed at that distance of time from vaccination, where the vaccine affection in the habit seems to have assimilated the variolous matter to its own nature, forming the black vaccine, instead of the brown variolous scab.

*Psoriasis diffusa*, *Tinea Capitis*, and perhaps many other diseases of the skin have been found to alter the nature of the matter secreted in Vaccine Inoculation. Indeed a distinct different kind of virus is produced, having no power of preserving the constitution from any subsequent attack of small pox. Dr. Jenner thinks the same circumstances may take place in inoculated small pox. I can readily agree, that, from any existing affection of the skin, the inoculated pustule may be prevented from forming, or if formed may be only local; but if he means to infer, that the matter secreted will, like that in cow pox, differ from that which was inserted, and will not produce per-

fect small pox, I must take leave to differ from him. Experience teaches the contrary.

Now from this peculiarity in Cow Pox virus, and from the almost, if not total, absence of constitutional affection; may we not infer that—

*Vaccination is only the agent to excite a certain morbid affection in the skin, which creates in it the property of resisting the ERUPTION of Small Pox?*

Do not those variolated vaccine cases, wherein the vaccine inoculated vesicle produced true Cow Pox, while the pustules on the body, in the same subject, produced regular Small Pox, support this idea? And as there have been found many diseases of the skin, which prevent the vaccine virus from exerting its influence;

*May not the morbid action of Cow Pox be partially, or even wholly destroyed by any action of such diseases when taking place at a period SUBSEQUENT to Vaccination?*

THE greatest enemies to vaccination must admit, that the casual disease has prevented

small pox in numberless instances. Few well authenticated cases of failure are on record. While its most determined votaries must now acknowledge, that the inoculated disease, has already been found to fail in several. Cannot this be accounted for on the same principle? Those employed as milkers are generally adults, and have passed that period of life, when diseases of the skin are so prevalent, and are only subject to casual affections, which bear no proportion whatever to what occurs in both sexes before they arrive at the age of puberty. While those who have been vaccinated are chiefly infants, or such as have not passed the time of life so very subject to cutaneous eruptions.

THE frequent coincidence of small pox with cow pox, under the circumstances of previous variolation, when connected with the opinion entertained, that the two diseases pursued their progress through the system without interfering with each other, was found to be repugnant to the axiom of Mr. Hunter.



CONSCIOUS of the general accuracy of his observations, and impressed with a sense of his superior abilities, both Dr. Jenner and Dr. Woodville supposed small pox and cow pox to be the same disease, under different modifications. This, however, was not commensurate with the zeal of some, who ask, “but what proof have we, that even the limited axiom of Mr. Hunter, is founded on the basis of truth? Why are two morbid actions more incompatible than two healthy ones? That two, or more healthy actions in the stomach, may co-exist, will not, I apprehend, be denied. When the peristaltic motion takes place, by muscular action, surely no one will maintain, that the action of the nervous or arterial system must necessarily be suspended”!!

EVEN Mr. Hunter’s eccentricities will be allowed to have been coruscations of genius, before which, these little meteors of an hour must hide their diminished heads. Few will be induced to admit, that the muscular motion of the stomach is a distinct action from that of

the arterial or nervous system, being so far combined, that neither of them can exist independent of the other. Yet, on a foundation so weak, have they hurried this great man from the niche he so deservedly occupied in the Temple of Fame. Opinions long received must be discarded at will, and the whole circle of science must undergo a revolution, only to make it quadrate with the aberrations of vaccination !

It was not originally Dr. Jenner's wish to controvert this opinion of Mr. Hunter, and he appears, to be modestly descending from the elevated station, into which, the blind, injudicious zeal of his disciples had forced him ; when he admits, that perfect vaccination will not take place during the existence of some peculiar affections of the skin. His great predecessor had before asserted, that two diseased actions CANNOT take place at the same time, in one and the same part.

THE RESULT OF OBSERVATIONS ON THE EFFECT  
OF ERUPTIVE DISEASES IN REMOVING THE SE-  
CURITY DERIVED FROM COW POX.

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WHETHER the security against small pox be impaired only, or whether it be totally removed by any subsequent eruptive disease, or cutaneous affection, can only be established by facts. I shall therefore lay before the reader, such circumstances as, on a minute inquiry, have come to my knowledge, leaving him to compare the cases, and draw his own inferences.

*Of the Cases formerly published.*

I. MASTER Grant had SCARLATINA slightly, and soon afterwards VARICELLA, about two years from vaccination; while the younger child, who resisted the test, never had any eruptive disease.

II. MR. WORSFOLD'S child had MEASLES at the end of two years.

III. MR. LUSCOMBE'S child had VARICELLA, after it had resisted the exposure to infection.

IV. MR. DUNNING'S child. In this case I cannot trace any intervening disease.\*

V. MR. LIGHT'S child had VARICELLA.

VI. CLARK the Marine had PRICKLY HEAT in the West Indies, and was much debilitated by dysentery, which is often a CONTAGIOUS disease between the tropics.

VII. MR. CALLARD'S child had VARICELLA.

VIII. MR. WARNER'S child had MEASLES three months after he was exposed to small pox.

*Of the Cases now reported.*

I. MR. CALLARD'S child had VARICELLA, prior to her being exposed with her brother,

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\* This child had only one eruption that matured, which happening to be on the arm, has given occasion for cavil, and it has been said to have arisen from a fresh inoculation, by the child scratching itself. This I should have passed unnoticed, had not a very candid critic in the Monthly Review attributed it to a second accidental puncture by the lancet, making it a primary pustule. Mr. Weymouth however assures me, that it was a *secondary* pustule, appearing after eruptive fever, along with those that did not mature.



when she resisted infection; but it should be had in remembrance, that she was then labouring under *hectic fever*, but, when recovered by country air, she became immediately susceptible.

II. MR. DANCE'S child had *ESSERA*, which was very obstinate for a long time; it arose about six months after vaccination.

III. THIS being an instance of imperfect vaccination, it is not necessary to advert further to it.

IV. MISS HITCHINGS. In respect to this case, it might be remarked, that *SCARLATINA* raged in the Village, very malignantly, last summer, and I have some reason to think, that this is not the only instance of the little artificial *Variolæ* having happened there since.

V. VI. A FRIEND has made inquiry for me of Mrs. Hodges, the mother of these children, and I find the eldest had *MEASLES* and *VARI-CELLA* after Vaccination, and the youngest *MEASLES*; while it is to be observed, she was labouring under *HOOPING COUGH* when attacked with Small Pox.

VII. MISS SIMMONS had MEASLES soon after she was exposed to the infection of Small Pox at Lymstone.

VIII. IN respect to this case, I have no information. But it has excited the attention of the Physicians of the Vaccine Pock Institution, who from the appearance of the arms, and the examination of the mother, are of opinion that she did not go regularly through the Cow Pock, in 1800; yet the gentleman who inoculated her pronounced her secure from Small Pox in future. His friends indeed would wish it to be believed, that this girl was vaccinated very early in his practice, but that could not have been the case, if it were done so late as any part of the year 1800. At any rate, I hope it will teach him a little more moderation, and learn him in future to be more correct himself, before he accuses others of ignorance in the practice.

IX. X. MISS BOWEN had MEASLES about two years and a half after she was vaccinated. She however refused the third inoculation afterwards. In respect to the other case, Mr.

Bowen does not mention whether any eruptive disease had intervened.

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THE liberality of the Vaccine Institution is most conspicuously shewn, by their permitting the Editors of the Medical and Chirurgical Review to publish extracts from their minutes, which are inserted in their last publication.

OCT. 16, 1804. It appears, " Dr. Woodville and Mr. Wachsel, who were both present at the Committee, declared that they never knew an instance of small pox occurring a second time after inoculation, except one mentioned by Mr. W. and which he considered doubtful, from the short duration of the eruption in the inoculated part, and being without any constitutional affection or general eruption. Dr. W. said, he did not believe a person ever had the small pox twice ; and his predecessor, Dr. Archer, who was forty-two years Physician to the Small Pox Hospital, was of the same opinion. Mr. W. stated, that he does not know any criterion to judge of secu-

rity against future small pox, since the events of Hodges' Cases; considering those cases to be such as would be deemed distinct ones, as far as at present is known of Cow Pock."

How are we then to account for the following assertion in the Medical Journal for November, page 441. "Dr. Woodville said on the occasion, that if it should be found to be the small pox, the cow pox inoculation stood upon as good grounds as the variolous; for that it had happened in the course of a year that several patients had come to the Hospital sprinkled with the small pox, who had previously gone through the variolous Inoculation." Will Dr. Woodville suffer this to go unnoticed?

I am very ready to pay a proper deference to Dr. Pearson's judgment, but I cannot concede to him, that a second vaccination is a better test than variolous inoculation. I have already adverted to the milker's having the casual disease more than once. This cannot be controverted. If inoculated cow pox therefore be the same disease, it must be guided by



the same laws. But if any intervening disease should remove its action on the skin, then a repetition of vaccination would only be deceptive ; because, if it should take place, the first will be deemed to have been imperfect without any just reason. Hence perhaps might be deduced the phænomenon, why the inoculated differs so very materially from the casual disease.



## C O N C L U S I O N.

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**H**ITHERTO, when any failure has occurred, a few individuals have been suffered to ring the changes on chicken pox, and spurious pustule, without controul. This forbearance in the profession, has occasioned the public journals to be filled with communications, more resembling the handbills of a vender of nostrums, than the productions of a regular practitioner. At one time the disease was reported to have the power of preventing the plague; while at another, long catalogues of diseases, it was to eradicate, were produced, with an effrontery scarcely exceeded by the most eminent empiric.

To get rid of any inquiry into its defects, the most unbounded abuse has been resorted to, which, if not sanctioned by the institutions, no attempts were ever made to restrain it. The future welfare of society, therefore, makes it highly desirable, that some respectable mem-

bers of the profession should form themselves into an independent association, for the express purpose of receiving communications, and examining the question with the strictest impartiality.

How desirable would it be, to ascertain the extent of the combined actions of the two diseases; and to determine, how far the power of the one might be made useful, to render the eruption of the other mild, and divest it of its contagious principle? A mode of proceeding, the most likely, perhaps, finally to exterminate small pox.

THE quality of the matter, likewise, when taken at different stages of the disease, is still open to investigation. The golden rule, as it has been called, *may* be correct; but repeated experience has shewn, that, when taken from a perfect pustule at a much later period, it is equally efficacious. The result of those cases, where the vesicle has been rubbed off, altho' a distinct indentation has been formed, may lead us somewhat to suspend our opinion of the Efficacy of Matter, taken before it has the

power to exert a proper influence on the subject, where it was secreted. It being the fashion now, to take it almost as soon as any can be obtained, makes it the more desirable to be ascertained. The error might be as fatal on the one side as on the other, and some failures might have arisen from this circumstance alone.

To conclude. Unawed by clamour, I have now performed a duty I owed to society, and have only to add, that, for some time past, the small pox has been comparatively mild; the risk therefore to vaccination has been small in proportion: But the full extent of its powers can only be ascertained, whenever it shall again become the prevailing epidemic. When the state of the atmosphere shall again be so far variolated, that seclusion can be of little avail, then will be the time to prove, how far the security it gives will extend.

Periculosum est credere, et non credere:  
 Utriusque exemplum Brevis exponam rei.  
 Hippolitus oblit, quia novercæ creditum est:  
 Cællandræ quia non creditum, ruit ille.  
 Ergo exploranda est veritas multùm potius,  
 Quàm stulta pravè judicet sententia.

PÆD.

FINIS.



P. S. THESE last pages were in the press, when an advertisement, in one of the morning papers, was pointed out to me, announcing the publication of “ Observations addressed to the Public on Cow Pox, shewing that it originates in *Scrophula*, commonly called the Evil,” &c. By Dr. Squirrel.

I HAVE no knowledge of this gentleman, and am at a loss to conceive on what grounds he ventures to publish an hypothesis so repugnant to universal observation. For, notwithstanding experience leads me to doubt the permanence of its security, yet I shall be at all times ready to testify, that I never saw any ill effects, or any disease arising from vaccination, excepting a few instances of troublesome eruptions, which might have appeared in the same subjects had they been inoculated with small pox. On the contrary, I am firmly of opinion, that the constitutional affection, when it does take place, is too slight to excite any scrophulous disposition into action.

*Lately was published in Octavo, price 1s. 6d.*

CASES OF  
S M A L L P O X,

SUBSEQUENT TO

V A C C I N A T I O N,

WITH FACTS AND OBSERVATIONS, READ BEFORE

THE MEDICAL SOCIETY AT PORTSMOUTH,

MARCH 29, 1804.

ADDRESSED TO THE DIRECTORS OF THE

VACCINE INSTITUTION.

---

BY WILLIAM GOLDSON,

*Member of the Royal College of Surgeons, in London.*

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*Where may be had,*

A

REPORT OF A MEDICAL COMMITTEE

ON THE

CASES OF SUPPOSED SMALL POX,

AFTER

V A C C I N A T I O N,

WHICH OCCURRED IN

FULLWOOD'S RENTS, HOLBORN,

IN AUGUST AND SEPTEMBER, 1804.

WITH AN ACCOUNT OF SOME SUBSEQUENT INOCULATION

•CTAVO, PRICE ONE SHILLING.

THE  
OFFICE OF THE  
SECRETARY OF THE  
NAVY  
WASHINGTON, D. C.  
JANUARY 1, 1900

TO THE  
HONORABLE  
MEMBERS OF THE  
NAVY  
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